# OFFICIAL FILE ILLINOIS COMMERCE COMMISSION

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## STATE OF ILLINOIS ILLINOIS COMMERCE COMMISSION

COVAD COMMUNICATIONS COMPANY )	
Petition for Arbitration Pursuant to Section )	
252(b) of the Telecommunications Act of 1996 to )	
Establish an Amendment for Line Sharing to the)	Docket No. 00-0312
Interconnection Agreement with Illinois Bell	(Rehearing)
Telephone Company d/b/a Ameritech Illinois,	<b>.</b>
and for an Expedited Arbitration Award on )	
Certain Core Issues.	
,	
)	
RHYTHMS LINKS, INC.	
)	
Petition for Arbitration Pursuant to	
Section 252(b) of the Telecommunications	
Act of 1996 to Establish an Amendment	
for Line Sharing to the Interconnection )	Docket No. 00-0313
Agreement with Illinois Bell Telephone	(Rehearing)
Company d/b/a Ameritech Illinois, and	,
for an Expedited Arbitration Award on )	
Certain Core Issues.	

AMERITECH ILLINOIS BRIEF ON REHEARING

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#### INTRODUCTION

Two issues remain in this rehearing. The first issue is whether the Illinois Commerce Commission ("Commission") should revise and eliminate its original conclusion in its August 17, 2000 Arbitration Decision ("Arbitration Decision") that Ameritech Illinois be required to include in its interconnection agreements with Rhythms Links Inc. ("Rhythms") and Covad Communications Company ("Covad") provisions that would permit Rhythms and Covad to "virtually collocate" their own line cards in Ameritech Illinois' DSL-capable Next Generation Digital Loop Carrier facilities ("NGDLCs") that Ameritech Illinois plans to deploy in Remote Terminals ("RTs") as part of Project Pronto (the "Project Pronto requirement"). The second issue is whether a *uniform 13-state-wide*, *negotiated* price that SBC and Covad agreed to for certain non-recurring charges associated with the provisioning of the high frequency portion of the loop ("HFPL") UNE can be imported into an *Illinois-specific*, *arbitrated* interconnection agreement between Ameritech Illinois and Rhythms.

With respect to the first issue, both the law and the facts establish that the only possible answer is for the Commission to eliminate the requirement set out in its Arbitration Decision. Putting aside the numerous legal infirmities in the Commission's original conclusion—which Ameritech Illinois discussed at length in its Application for Rehearing and discusses further below—the record on rehearing establishes that retaining the Project Pronto line card "virtual collocation" requirement would disserve the public interest. In particular, it would threaten to eliminate any economic basis for Ameritech Illinois to continue deployment of Project Pronto facilities on the end-user "side" of the network designed to support the provision of DSL services to end-users (primarily residential end-users) who otherwise might lack the opportunity to obtain such DSL services today.

From a public interest perspective, the Commission should be extremely cautious about imposing new and unnecessary obligations on a single participant, such as Ameritech Illinois (who participates only at the wholesale level), in an otherwise new, competitive market—which the Advanced Services market clearly is. It is undisputed that the Advanced Services market is dynamic and marked by robust competition involving a multitude of competitors and a variety of alternative emerging technologies, such as wireless broadband services and cable modem services (provided, for example, by AT&T and Time Warner over their extensive cable systems). It is also undisputed that these alternative technologies—in particular, cable modem services—presently possess the lion's share of the Advanced Services market. And it is undisputed that, with the exception of Ameritech Illinois (which has never provided retail DSL services and is currently prohibited by law from doing so), all of the other market participants are essentially unregulated.

In these circumstances, to impose unnecessary obligations on Ameritech Illinois—a potential major market participant and major source of innovation—makes no sense from a public policy perspective and flies in the face of the procompetitive goals of the 1996 Act and of this Commission, especially the goals of encouraging innovation in and deployment of Advanced Services. The FCC, for one, has repeatedly recognized the danger of "overregulating" in an emerging, competitive market such as the Advanced Services market, declining, for example, to generally require cable services providers to provide competitors with "open access" to their cable systems and rejecting attempts by Rhythms, Covad and other CLECs to impose the exact same Project Pronto unbundling and collocation requirements that the Arbitration Decision erroneously imposes. This Commission should be similarly reluctant to tamper with market forces.

The risk that this Commission runs of distorting market outcomes in a socially undesirable manner by compelling excessive and inefficient use of one firm's (Ameritech Illinois') innovations and assets by other market participants is not theoretical. It is real. Indeed, because of the high degree of regulatory uncertainty that the recent Hearing Examiner's Proposed Order ("HEPO") in Docket No. 00-0393 (the Commission's investigation of Ameritech Illinois' HFPL UNE tariff) creates regarding the terms and conditions that this Commission may impose on Ameritech Illinois' planned deployment of wholesale DSL services through Project Pronto, Ameritech Illinois has suspended its deployment/activation of DSL-related Project Pronto facilities (*i.e.*, Central Office OCDs and DSL-capable line cards) in this state.

In short, the Arbitration Decision's Project Pronto NGDLC line card "virtual collocation" requirement is unlawful and misguided. By forcing Ameritech Illinois to provide CLECs with access to its innovations in a manner that is inefficient, costly, and plainly unnecessary to promote competition in the relevant market ( the Advanced Services market), this requirement would decrease, if not eliminate, any reasonable business incentive for Ameritech Illinois (or for any other incumbent LEC) to invest in, deploy and enhance its innovations in that market. As a result, the Arbitration Decision's Project Pronto requirement, if left intact, would only *reduce* competition in the relevant market, to the detriment of Illinois consumers. The Commission should eliminate the Arbitration Decision's requirement on this issue.

With respect to the second issue, the non-recurring charges for cross-connects, the record on rehearing confirms that Ameritech Illinois' proposed non-recurring charges for cross-connects approved by the Arbitration Decision are reasonable. Indeed, the only "evidence" Rhythms has

<sup>&</sup>lt;sup>1</sup> Notably, the HEPO in Docket No. 00-0393 (at 21) indicates that it expects the same result in this docket as was reached in Docket No. 00-0393.

presented on rehearing is no evidence at all, but merely a claim that the non-recurring prices for cross-connects negotiated between SBC and Covad to *uniformly* apply across SBC's *entire 13-state region*, based on a *negotiated* global settlement between Covad and SBC that covered a myriad number of business issues, are lower than the Illinois-specific charges approved by the Commission in this arbitration. The *negotiated* prices agreed to with Covad, however, do not represent an Illinois-specific, TELRIC-based price for cross connects. Under the law, negotiated prices need not (and in this case, do not) comply with the FCC's TELRIC methodology. And even if those prices did reflect TELRIC costs, they would reflect an *average* of such costs incurred across 13 states, *not* Illinois-specific TELRIC costs.<sup>3</sup> The Commission properly found in its Arbitration Decision that Ameritech Illinois' proposed nonrecurring charges for cross-connect jumpers are TELRIC-based, reasonable and comply with the Eighth Circuit's decision in *IUB III*. (*Rhythms/Covad Arbitration Decision* at 53-54). Rhythms and Covad have provided no evidence to the contrary.

For the reasons summarized above and set forth in greater detail below, the Commission should eliminate from its Arbitration Decision the Project Pronto NGDLC line card "virtual collocation" requirement and confirm its conclusion with respect to Ameritech Illinois' non-recurring prices for cross-connect jumpers. Any other action by the Commission would result in the creation of interconnection agreements that not only would disserve the public interest but would not and could not comply with the provisions of Section 251 of the Act, and therefore

<sup>&</sup>lt;sup>2</sup> Ameritech Illinois will proceed with its POTS only Project Pronto deployment in Illinois in connection with its ongoing efforts to improve service quality.

<sup>&</sup>lt;sup>3</sup> Significantly, as soon as the agreement between SBC and Covad is approved by the applicable state commissions, Rhythms can get the exact same terms and conditions as Covad --including the prices applicable on a uniform basis across SBC's entire state region -- via Section 252(i) of the Act.

could not be lawfully approved by this Commission once they were submitted for approval under Section 252(e) of the Act.

#### ARGUMENT

I. AMERITECH ILLINOIS CANNOT LEGALLY BE REQUIRED TO UNBUNDLE PROJECT PRONTO AND PERMIT CLECS TO OWN OR DESIGNATE LINE CARDS IN PROJECT PRONTO NGDLCS.

The Arbitration Decision's Project Pronto requirement violates applicable law. As we explain below, the decision imposes on Ameritech Illinois additional unbundling obligations that do not currently exist under federal law, are directly counter to controlling FCC decisions, and, in fact, are the subject of ongoing proceedings in front of the FCC, in which the CLECs are actively participating. Putting aside the lack of any federal law requirement to unbundle Project Pronto, the Arbitration Decision's newly-imposed requirement to unbundle Project Pronto and allow CLECs to own or designate and virtually collocate Project Pronto NGDLC line cards is unlawful because the requirements of Sections 251(d)(2) and 261(c) of the Act have not been met. Additionally, the Arbitration Decision's Project Pronto requirement directly conflicts with numerous FCC and federal court decisions, including the *Project Pronto Order*<sup>4</sup>, the *UNE Remand Order*<sup>5</sup>, the Eighth Circuit's Decisions in *IUB I*<sup>6</sup> and *IUB III*, <sup>7</sup> and the Supreme Court's

<sup>&</sup>lt;sup>4</sup> See Ameritech Corp. and SBC Communications Inc., Petition for Consent to Transfer Control of Corporations Holding Commission Licenses and line Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95 and 101 of the Communications Rules, Second Memorandum Opinion and Order, CC Docket 98-141. FCC 00-336 (rel. Sept. 8, 2000) ("Project Pronto Order").

<sup>&</sup>lt;sup>5</sup> Third Report and Order and Fourth Further Notice of Proposed Rulemaking, In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98 (rel. Nov. 5, 1999) ("UNE Remand Order").

<sup>&</sup>lt;sup>6</sup> Iowa Utils Bd. v. FCC, 120 F. 3d 753 (8<sup>th</sup> Cir. 1997), aff'd in part, rev'd in part sub nom. AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366 (1999) ("IUB I").

<sup>&</sup>lt;sup>7</sup> *Iowa Utils. Bd. v. FCC*, 219 F.3d 744 (8<sup>th</sup> Cir. 2000) ("*IUB III*").

decision in *IUB II*<sup>8</sup>. *See* Am. Ill. Application for Rehearing at 8-28; Am. Ill. Init. Br. in Docket No. 00-0393 at 10-45; Am. Ill. Reply Br. in Docket No. 00-0393 at 9-47.

A. REQUIRING AMERITECH ILLINOIS TO UNBUNDLE PROJECT PRONTO AND PERMIT CLECS TO OWN OR DESIGNATE LINE CARDS IN PROJECT PRONTO NGDLCS IS UNLAWFUL FOR THE REASONS EXPLAINED IN AMERITECH ILLINOIS' APPLICATION FOR REHEARING IN THIS DOCKET AND IN ITS INITIAL AND REPLY BRIEFS IN DOCKET NO. 00-0393.

The issue of "line sharing" over Project Pronto facilities deployed by Ameritech Illinois between its Central Offices and Remote Terminals (which the record establishes is not FCC-defined line sharing at all) also has been raised by CLECs in the Commission's investigation of Ameritech Illinois' HFPL UNE tariff in Docket No. 00-0393. In that proceeding, the CLECs advocate the same position that the Commission adopted in its original Arbitration Decision in this case—that Ameritech Illinois should be required to unbundle Project Pronto and allow CLECs to own or designate and virtually collocate line cards in Ameritech Illinois Project Pronto NGDLCs. Many of the legal and policy reasons why the Arbitration Decision's original conclusion on this issue is unlawful, impracticable and unsound as a matter of policy are set forth in Ameritech Illinois' Application for Rehearing in this docket, and in Ameritech Illinois' Initial and Reply Briefs in Docket No. 00-0393. At the request of the Hearing Examiner, we will reiterate these reasons only briefly here. For a fuller discussion of these reasons, Ameritech Illinois has attached the relevant portions of its Briefs in Docket No. 00-0393. See Attachment A.

First, the Arbitration Decision's conclusion to treat the bulk of the Project Pronto network as a UNE must be rejected because it irreconcilably conflicts with the *UNE Remand Order*.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366 (1999) ("IUB II" or "AT&T Corp.")

<sup>&</sup>lt;sup>9</sup> See Am. Ill. Application for Rehearing at pp. 25-26; Am. Ill. Init. Br. in Docket No. 00-0393 at pp. 30-32.

This proposed new "Project Pronto UNE" or UNEs include, among other things, the packet switching functionality of the NGDLC and the OCD. Among other things, the NGDLCs being deployed by Ameritech Illinois under Project Pronto digitize the data signals received over the copper subloop from a DSL subscriber and "packetize" those digitized signals into "cells" for transmission to the OCD at the Central Office. Tr. at 181, 232-33, 362-63. The OCD is an ATM switch. Project Pronto Order, para. 18. ATM switches are packet switches. Id.; see also UNE Remand Order, para. 303. The FCC held in the UNE Remand Order that an ILEC is not required to provide packet switching as a UNE as long as the ILEC allows CLECs to collocate their DSLAMs in the ILEC's Remote Terminals (or meets other criteria), which Ameritech Illinois does. UNE Remand Order, para. 313; 47 C.F.R. 51.319(c)(4)-(5); Am. Ill. Ex. 6.1 (Lube) at 14-17. This Commission cannot ignore or nullify the FCC's packet switching determination by ordering the unbundling of the Project Pronto network, including the packet switching functionality of the OCD and the NGDLC. See AT&T Corp., 119 S. Ct. at 730 n.6. In short, the Arbitration Decision's NGDLC line card virtual collocation requirement directly conflicts with the FCC's determination that packet switching functionality does not satisfy the Act's "necessary" and "impair" standards and hence should not be unbundled, except in limited circumstances not applicable here. The Arbitration Decision's conclusion is therefore preempted and precluded by controlling federal law. Geier v. American Honda Motor Co., 120 S. Ct. 1913, 1921 (2000).

Second, the Commission cannot order the unbundling of Project Pronto because the requirements of Section 251(d)(2) of the Act and FCC Rule 317 (the "necessary" and "impair" standards) have not been met.<sup>10</sup> Section 251(d)(2) and Rule 317 require a "fact intensive"

<sup>&</sup>lt;sup>10</sup> See Am. Ill. Application for Rehearing at 24-25; Am. Ill. Init. Br. in Docket No. 00-0393 at 28-30.

analysis that "consider[s] the totality of the circumstances," including market conditions and the availability of alternatives to the UNE, to determine whether, among other things, lack of access to the UNE will "materially" diminish CLECs' ability to provide the services they seek to offer. UNE Remand Order, paras. 62, 142. Significantly, IUB II makes clear that Section 251(d)(2) – and correspondingly FCC Rule 317 – places the burden of proof on the requesting carrier to affirmatively establish by objective, market-based evidence that the unbundling they seek satisfies the requirements of Section 251(d)(2). Specifically, the Supreme Court stated: "Section 251(d)(2) does not authorize the Commission to create isolated exemptions from some underlying duty to make all network elements available. It requires the Commission to determine on a rational basis which network elements must be made available, taking into account the objectives of the Act and giving some substance to the 'necessary' and 'impair' requirements." IUB II, 525 U.S. at 392 (emphasis added). And the Supreme Court also has held that, in order to satisfy this burden, a mere showing by the CLEC that a failure to unbundle would increase the CLEC's financial or administrative costs is not sufficient. Id. at 389-392.

Neither Rhythms nor Covad have met this rigorous standard. Indeed, the only "evidence" presented in this rehearing by these two CLECs is not evidence at all, but rather vague, unsupported assertions that they somehow will be competitively harmed, or will face increased costs (which the Supreme Court has held is insufficient to satisfy the burden of proof) if the Arbitration Decision's Project Pronto requirement is not kept intact. In short, the record contains none of the types of information necessary to conduct the "fact intensive" review required by law. In fact, the only relevant evidence shows that there are several meaningful alternatives to the "Project Pronto UNE." See *Project Pronto Order*, App. A. Indeed, the record establishes that there are several alternatives available to CLECs for offering DSL services, including: (1)

CLECs may utilize Ameritech Illinois' Broadband Service offerings which, as described above, would reduce the CLECs' costs; (2) CLECs may continue to lease all-copper loops (or the HFPL of those loops) to provide DSL service, which obviously will not cost any more than what the CLECs have always paid; and (3) CLECs may choose to collocate their own stand-alone DSLAM equipment in Ameritech Illinois' RT sites and lease cooper subloops (or the HFPL of those subloops).

The CLECs nevertheless incorrectly claim that these options are insufficient. More specifically, Rhythms and Covad baldly assert that, absent unbundling, Project Pronto will eliminate their ability to provide DSL services to end users. This simply is not true. As Staff witness Mr. Clausen acknowledged, all the traditional line sharing options that CLECs have available to them today will continue to exist once Project Pronto is overlaid on the network. Tr. at 112. Accordingly, Project Pronto will not eliminate or impair the CLECs' ability to provide DSL services to end users.

Rhythms and Covad also assert, without any credible evidentiary basis, that their ability to provide DSL service will be impaired if the Arbitration Decision's Project Pronto requirement is not imposed, because it is purportedly impracticable to collocate DSLAMs at RTs. Again, the evidence proves the contrary. In fact, the CLECs themselves have acknowledged that collocation at the RT is technically and economically feasible, when they *successfully* asked for the FCC, in the *Project Pronto Order* proceedings, to (1) clarify that Section 251(c)(2) imposes an independent obligation on SBC ILECs to permit technically feasible interconnection at RTs and other intermediate loop concentration or connection points and (2) require that all new RTs be designed to accommodate collocation by at least five competitive local exchange carriers. Clearly, if the CLECs did not believe that RT collocation was economically feasible, they would

not have asked the FCC to make the above findings. Moreover, the FCC presumably would not have imposed the RT collocation requirements that it did impose as part of the *Project Pronto*Order conditions, if such collocation was not feasible.

Similarly, Rhythms and Covad assert that they will not be able to use Central Office-based copper loops to provide DSL service once Ameritech Illinois deploys its Project Pronto DSL facilities because of alleged "cross-talk" problems. This assertion is equally without merit and is purely speculative. Am. Ill. Ex. 7.2 (Keown) at 11. Although the issue of potential "cross talk" problems is being considered by the T1E1 committee (Tr. at 261) of the Alliance for Telecommunications Industry Solutions ("ATIS") and by the National Reliability and Interoperability Council (Tr. at 345), no regulatory or industry body has concluded that such a problem will in fact occur. Moreover, even if such "cross-talk" problems are found to potentially exist, there is nothing to suggest that a solution would not be found. Significantly, if potential problems were found to exist, the same problem would exist every time a CLEC collocated a DSLAM at an RT. In other words, the problem would arise from CLECs' as well as ILECs' placement of facilities at an RT and would affect all DSL providers equally. Accordingly, the industry likely would find a solution.

It should also be noted that the *UNE Remand Order* (at ¶¶ 101-115) sets forth several policy factors which should be considered when making an unbundling determination, incremental to the requirements of Section 251(d)(2) of the Act. Consideration of these policy factors only reinforces the conclusion that Ameritech Illinois cannot be lawfully required to unbundle Project Pronto. *See* Am. Ill. Init. Br. in Docket 00-0393 at 33-36.

Third, the original Arbitration Decision's conclusion to require Ameritech Illinois to establish new Project Pronto UNEs and allow virtual collocation of CLEC line cards conflicts

with the Act and the FCC's national policy framework and therefore is preempted by federal law. 11 More specifically, in the *Project Pronto Order*, the FCC determined that allowing the SBC ILECs to own and control line cards used with Project Pronto NGDLCs is in the public interest and is the best means for promoting advanced services deployment and competition, provided that the SBC ILECs offer CLECs end-to-end wholesale Broadband Services over the Project Pronto facilities and satisfy other pro-competitive commitments. *Project Pronto Order*, paras. 1-2, 23, 28. The Arbitration Decision takes an approach to advanced services competition that is directly at odds with the approach in the FCC's rulings and is preempted under established Supreme Court doctrine. 12 *Geier v. American Honda Motor Co.*, 120 S. Ct. 1913, 1921 (2000); *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941)).

Fourth, the Arbitration Decision's Project Pronto line card virtual collocation requirement would unlawfully force Ameritech Illinois to affirmatively create new combinations of UNEs on Rhythms' and Covad's behalf, as Ameritech Illinois would be required to combine the CLECs' NGDLC line cards with an unbundled copper subloop and an unbundled OCD/NGDLC/lit fiber combination in order to create an end-to-end combination of network elements capable of supporting DSL services. As explained more fully below, this requirement directly violates the Eighth Circuit's holding in *IUB I* and *IUB III* that incumbent LECs cannot be forced to affirmatively combine UNEs for CLECs.

The fact that the Eighth Circuit's holding in *IUB I* and *IUB III* is binding on the FCC and the states is confirmed by the federal District Court for the Western District of Michigan's decision on December 5, 2000, in *Verizon North, Inc. v. Strand*, File No. 5:98-CV (W.D. Mich.

<sup>&</sup>lt;sup>11</sup> See Am. Ill. Application for Rehearing at 13-23; Am. Ill. Init. Br. in Docket No. 00-0393 at 13-20.

Dec. 5, 2000). In this case, the court overturned the state commission's decision ordering Verizon North to offer unbundled network elements as combinations of platforms at a CLEC's request. Relying on the Eighth Circuit's decision in *IUB III*, the court held that any state requirement that an ILEC combine UNEs for CLECs is preempted by the Act. Specifically, the court rejected the Michigan commission's theory that *IUB III* "does not prohibit the combination of unbundled network elements, but rather only holds that combinations are not required by the FTA," finding that this argument rested on a "mistaken interpretation" of the law. *Verizon North*, slip. op. at 13. The court then held:

Under the FTA it is the duty of requesting carriers, not the incumbent LECs, to combine the elements. *Iowa Utilities III* makes it clear that the FCC cannot insert a bundling requirement consistent with the terms of the FTA. *For the same reasons the state is precluded from imposing such a requirement*. Accordingly, the Court finds that the MPSC's order that Verizon providing bundling at the behest of competitive LECs *conflicts with and is preempted by the FTA*."

Id. at 13-14 (emphasis added). For this same reason, the Commission must eliminate the ProjectPronto requirement from the Arbitration Decision. Indeed, that requirement would requireAmeritech Illinois to create new combinations of network elements in violation of the Act.

Fifth, the Commission must revise its Arbitration Decision and eliminate its NGDLC line card virtual collocation requirement because the record lacks sufficient evidence for the Commission to find, as it must under Section 261(c) of the Act, that such a state-imposed requirement is "necessary" to "further competition in the provision of telephone exchange service or exchange access." Rhythms and Covad have failed to provide any specific evidence that the Arbitration Decision's requirement is "necessary to further competition" within the

<sup>&</sup>lt;sup>12</sup> Notably, the Act's savings clauses do not change this result because they mandate that any state regulation of line cards must be "consistent" with – or, put another way, "not inconsistent" with – the Act. 47 U.S.C. 251(d)(3), 261(c).

<sup>&</sup>lt;sup>13</sup> See Am. Ill. Application for Rehearing at 19-20; Am. Ill. Init. Br. in Docket No. 00-0393 at 21-25.

meaning of Section 261(c). Nor could they, in view of the commitments, including the Broadband Service commitments, made by SBC and incorporated by the FCC as conditions in the *Project Pronto Order*. Indeed, Rhythms and Covad's only assertions on this front -- that collocation of DSLAMs at Remote Terminals is somehow impractical and that deployment of Project Pronto facilities at the RT creates a potential for electronic "cross-talk" that purportedly might limit the CLECs' use of all copper loops for DSL services—are not only purely speculative and unsupported, they are belied by Rhythms and Covad's assertions before the FCC. A failure by this Commission to apply the governing federal law requirements established by Section 261(c) would be reversible error. *AT&T Corp.*, 119 S. Ct. at 736; *GTE Service Corp.* v. FCC, 205 F.3d 416, 422-23 (D.C. Cir. 2000); 220 ILCS 5/10-201(e)(iv)(B).

Sixth, the Arbitration Decision's Project Pronto UNE/line card collocation requirement violates the 1996 Act because it would require Ameritech Illinois to collocate CLEC-owned or CLEC-designated line cards in the NGDLCs being deployed as part of Project Pronto, without any evidence sufficient to satisfy the statutory test governing such collocation set forth in Section 251(c)(6) of the 1996 Act. Specifically, collocation of Project Pronto NGDLC line cards is not "necessary for interconnection or access to unbundled network elements" as is required by 47 U.S.C. 251(c)(6). See GTE, 205 F.3d at 422-23. Moreover, a line card is not a piece of equipment appropriate for collocation, because it is only a piece-part or sub-component of a complete item of equipment. See Am. Ill. Init. Br. in Docket No. 00-0393 at 36-41.

Seventh, the Eighth Circuit's decisions in *IUB I* and *IUB III* dictate that the Commission revise its Arbitration Decision and eliminate its NGDLC line card virtual collocation

<sup>&</sup>lt;sup>14</sup> See Am. Ill. Application for Rehearing at 26-27; Am. Ill. Init. Br. in Docket No. 00-0393 at 36-41.

requirement.<sup>15</sup> Under these decisions, the Commission cannot impose unbundling obligations on Ameritech Illinois that require it to build new facilities or provide superior quality service to CLECs. Any decision that requires Ameritech Illinois to deploy a certain type of equipment associated with Project Pronto which is <u>different</u> from what Ameritech Illinois plans to deploy, or to <u>add</u> additional equipment to the Project Pronto architecture that Ameritech Illinois is not planning to add, clearly violates the Eighth Circuit's decisions.

Eighth, sound technical and policy reasons dictate that the Commission not order Ameritech Illinois to unbundle equipment or facilities that Ameritech Illinois deploys pursuant to Project Pronto. 16 From a technical perspective, the evidence establishes that it is not technically feasible to unbundle this network architecture, because of the manner in which the components of the architecture interconnect and interwork with one another. Among other things, it is not technically possible to unbundle lit fiber—which carries numerous end-users' telecommunications traffic—from the end-user customer "side" of the ATM switch at the Central Office, the OCD. This means, as Staff's witness, Mr. Clausen, conceded (Tr. 119), that the Arbitration Decision's original requirement would require Ameritech Illinois to unbundle the pre-existing combination of the NGDLC at the RT, the lit fiber running between the NGDLC and the OCD, and the OCD itself – which, as noted above, would directly violate the FCC's determination that packet switching functionality is not subject to unbundling (except in limited circumstances not applicable here). And even if this were not the case, from a policy perspective, this Commission should not rush into any decisions that would require the unbundling of Project Pronto facilities and the forced collocation of NGDLC line cards because

<sup>&</sup>lt;sup>15</sup> See Am. Ill. Init. Br. in Docket No. 00-0393 at 25-27.

<sup>&</sup>lt;sup>16</sup> See Am. Ill. Application for Rehearing at 9-13; 22-23; Am. Ill. Init. Br. in Docket No. 00-0393 at 27-28. 32-36, 42-44.

those issues fall within the scope of pending rulemakings at the FCC, in which Rhythms and Covad are actively participating. In particular, in the *NGDLC FNPRM*<sup>17</sup> as well as the *Collocation FNPRM* (in the *Advanced Services* docket), <sup>18</sup> the FCC is continuing to review the issues of whether the unbundling of Project Pronto facilities would be technically feasible and whether such unbundling would satisfy the requirements of the Act.

For the above reasons, the Arbitration Decision's requirement that Ameritech Illinois permit Rhythms and Covad to virtually collocate their own line cards in Ameritech Illinois' Project Pronto NGDLCs is unlawful. Accordingly, the Commission should, and must, revise its decision to eliminate that requirement.

- B. ALLOWING CLECS TO PHYSICALLY OR VIRTUALLY COLLOCATE PROJECT PRONTO NGDLC LINE CARDS IS UNLAWFUL.
  - 1. ALLOWING CLECS TO VIRTUALLY COLLOCATE LINE CARDS VIOLATES THE EIGHTH CIRCUIT'S DECISIONS IN *IUB I* AND *IUB III*, AND THE SUPREME COURT'S DECISION IN *IUB II*.

With respect to the virtual collocation of Project Pronto NGDLC line cards (which is the only type of collocation requirement imposed by the Arbitration Decision and at issue in this rehearing), the Arbitration Decision directly conflicts with the Eighth Circuit's holding in *IUB I* and *III* that incumbent LECs cannot be required to create new UNE combinations for CLECs. Specifically, the facilities that would make up the end-to-end combination of network elements that the Arbitration Decision permits Rhythms and Covad to obtain are, by definition, necessarily

<sup>&</sup>lt;sup>17</sup> Fifth Further Notice of Proposed Rulemaking, CC Docket 96-98, August 10, 2000 ("NGDLC FNPRM").

<sup>&</sup>lt;sup>18</sup> Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket 98-147 and Fifth Further Notice of Proposed Rulemaking in CC Docket 96-98, *Deployment of Wireline Services Offering Advanced Telecommunications Capability* and *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Dockets 98-147 and 96-98 (rel. Aug. 10, 2000).

<sup>&</sup>lt;sup>19</sup> Virtual collocation of line cards is also inappropriate for the reasons discussed fully in Ameritech Illinois' Initial and Reply Briefs in Docket No. 00-0393.

not pre-combined with the CLEC's NGDLC line card. Rather, in order to create the end-to-end combination capable of supporting DSL services, the CLEC's line card must be installed into the NGDLC RT equipment. Accordingly, the Arbitration Decision's NGDLC line card virtual collocation requirement improperly requires Ameritech Illinois to affirmatively combine its network elements with *CLEC-owned* line cards.

The Eighth Circuit could not have stated more clearly, in vacating FCC Rules 315(c)-(f), that "Congress has directly spoken on the issue of who shall combine previously uncombined network elements" and required competing LECs to perform that task. *IUB III*, 219 F.3d at 759 (citing 47 U.S.C.  $\ni$  251(c)(3)). In *IUB I*, the Eighth Circuit held that Section 251(c)(3) of the Act "unambiguously indicates that requesting carriers will combine the unbundled elements themselves" and that the language of that section "can[not] be read to levy a duty on the incumbent LECs to do the actual combining of elements." 120 F.3d at 813. As the court put it, "the plain meaning of the Act indicates that the requesting carriers will combine the unbundled elements themselves." *Id.* The Eighth Circuit was equally emphatic in *IUB III*, finding that "Congress has directly spoken on the issue of who shall combine previously uncombined network elements. It is the requesting carriers who shall 'combine such elements." *IUB III*, 219 F.3d at 759. The court therefore held that the FCC's attempt to impose a new combinations requirement was impermissible because it "violate[d] the plain language of the statute." *Id.* 

The Eighth Circuit's decisions are binding on every carrier and state commission nationwide by virtue of the Hobbs Act.<sup>20</sup> Under the Hobbs Act (28 U.S.C. ∋ 2342(1)), the Eighth Circuit had exclusive jurisdiction to determine the legality of the FCC's attempt to require

On October 11, 2000, the Eighth Circuit issued its mandate in *IUB III*, which makes unmistakably clear that its rulings on UNE combinations and superior quality – which reaffirmed the Eighth Circuit's prior holdings in *IUB I* that were left undisturbed by the Supreme Court in *IUB II* – must be followed as binding federal law.

incumbent LECs to provide new combinations. The Hobbs Act "avoids the possibility of conflicting litigation where two courts have concurrent jurisdiction to resolve the same issues" (*Southwestern Bell Tel. Co. v. Arkansas Pub. Serv. Comm'n*, 738 F.2d 901, 907 (8<sup>th</sup> Cir. 1984), vacated on unrelated grounds, 476 U.S. 1167 (1986)), by consolidating all petitions for review of FCC orders interpreting and/or implementing the Act in a single court of appeals. As the Supreme Court has made clear, the Hobbs Act's jurisdictional preclusion is broad. It not only bars direct review of an agency's interpretation of the governing statute in courts other than the designated Hobbs Act court of appeals, but also forbids indirect review of such agency action.<sup>21</sup>

The bottom line is this: the Eighth Circuit has held that imposing an affirmative UNE combination requirement on incumbent LECs, such as that inherent in the Arbitration Decision's NGDLC line card virtual collocation requirement, violates the Act. The Eighth Circuit has drawn the line "to which [state commissions] must hew." *IUB II* at 378 n.6. Any decision by a state Commission to the contrary, such as the Arbitration Decision's requirement, is preempted under *Geier*. 120 S.Ct. at 1919-1920. Accordingly, the Commission must reverse its Arbitration Decision on this issue and eliminate its NGDLC line card virtual collocation requirement.

2. PHYSICAL COLLOCATION OF LINE CARDS IS BEYOND THE SCOPE OF THIS REHEARING AND, EVEN IF IT WERE WITHIN THE SCOPE OF THIS REHEARING, SUCH PHYSICAL COLLOCATION SHOULD NOT, AND LEGALLY CANNOT, BE ALLOWED.

As a threshold matter, with respect to the collocation of line cards, the Commission's Arbitration Decision states:

<sup>&</sup>lt;sup>21</sup> See FCC v. ITT World Comm., Inc., 466 U.S. 463, 468 (1984); Wilson v. A.H. Belo Corp., 87 F.3d 393, 399-400 (9th Cir. 1966); see also Louisiana Pub. Serv. Comm'n v. FCC, 476 U.S. 355, 369 (1986). Consistent with these rulings, the Ninth Circuit recently held that non-Hobbs Act courts may not collaterally attack FCC decisions that purport to interpret sections of the Act. US West Communications, Inc. v. Hamilton, 2000 WL 1335548, at \*3-\*5 (9th Cir. Sept. 13, 2000). Even if courts "doubt the soundness of the FCC's interpretation" of the Act, they "are not at liberty to review that interpretation." Id. at \*17. Instead, they "are required by the Hobbs Act" to apply an FCC regulation "as it is written" until the Hobbs Act reviewing court says otherwise. Id.

Finally, we must rule on the terms under which Ameritech will provide lineshared loops to Covad and Rhythms over Project Pronto DLC architecture. Specifically, the terms under which xDSL plug-in cards (which are necessary to allow line sharing over DLC) will be placed in the remote terminal for CLECs as well as the different types of plug-in cards that will allow to be placed in the remote terminal. The Commission finds that Ameritech is required to install plugin cards (purchased by either Ameritech or Covad/Rhythms) at its remote terminals, at Covad's and Rhythms' request, thereby allowing the CLECs to provide xDSL service over Project Pronto DLC. To the extent that Ameritech installs plug-in cards for Covad or Rhythms that have been purchased by Ameritech, Covad and Rhythms are required to fully compensate Ameritech for the cost of the plug-in card. Although Covad and Rhythms claim that it is critical to be able to install their own plug-in cards so that consumers have access to a full range of DSL-based services, the Commission is not convinced that there is sufficient evidence on the record to put in place standards that would mitigate the operational and security concerns that granting the requested access would induce. However, we require Ameritech to install plug-in cards which support all DSL-based services requested by the CLECs. If Covad's or Rhythms' business plan calls for a particular DSL service that requires a plug-in card that Ameritech does not provide itself, the burden of proof will lie with Ameritech to prove that the plug-in card is incompatible with Project Pronto DLC technology.

Rhythms/Covad Arbitration Decision at 32 (emphasis added). The Commission specifically found that CLECs, such as Rhythms and Covad, are *not* allowed to physically collocate line cards in Ameritech Illinois' network because of the operational and security issues that such physical collocation would create. In doing so, the Commission recognized that collocation of line cards in an NGDLC is *vastly* different from, and presents vastly different issues than, collocation of a CLEC's stand-alone equipment in a Central Office.<sup>22</sup> The Arbitration Decision imposes only a virtual collocation requirement on Ameritech Illinois. Neither Rhythms nor Covad sought rehearing of this determination and therefore the issue of physical collocation of Project Pronto NGDLC line cards is outside the scope of this rehearing.<sup>23</sup>

<sup>&</sup>lt;sup>22</sup> In fact, the closest Central Office collocation analogy, from a security and operational perspective, would be if an ILEC were required to allow CLECs to collocate line cards in the ILEC's central office circuit switch. As noted below, no regulator has ever imposed such a Central Office collocation requirement, either physical *or* virtual, on an incumbent LEC.

<sup>&</sup>lt;sup>23</sup> See *Citizens Utilities Board v. Illinois Commerce Commission*, 160 P.U.R.4th 455, \*59 (1995) (argument not raised in petition for rehearing is waived); *Abbott Laboratories, Inc. v. Illinois Commerce Commission*, 682

Even assuming that the Commission could reconsider the physical collocation of line cards in this rehearing (which it cannot), the Commission should not permit such physical collocation because Rhythms and Covad have presented no evidence in this rehearing as to how the operational concerns that Ameritech Illinois has identified (which are discussed in detail in Part II.A below), and that the Commission already has recognized in its Arbitration Decision, could be eliminated. Accordingly, there is no legal or factual basis for the Commission to reverse its decision rejecting the CLECs' request for physical collocation.<sup>24</sup>

Moreover, it would be an egregious error for the Commission to permit physical collocation of line cards. Physical access to the NGDLC systems at remote terminal sites where line cards are installed is akin to giving CLECs direct access to an ILEC's Central Office Main Distribution Frame ("MDF") or Central Office circuit switch, which neither the FCC nor any state commission has ever allowed. Because the line cards of numerous different CLECs as well as Ameritech Illinois all would be placed in the same channel bank assembly at the RT, allowing CLECs to physically install the line cards themselves would necessarily give them access to the line cards of Ameritech Illinois and of all other CLECs. Accordingly, the potential for a CLEC to interfere with or disrupt the service of their competitors, whether inadvertently or otherwise, would be manifest. This type of access has never been allowed by the FCC or any state commission, and should not be allowed here.

N.E.2d 340 \* 36-37 (1997) (petitions for rehearing raised numerous matters but did not specifically raise issue of Commission's statutory authority to impose unauthorized use penalty, and customers' generalized contentions that Commission's decision was "contra to the law" was plainly insufficient to preserve issue for review).

<sup>&</sup>lt;sup>24</sup> As noted in Part I.A above, as a legal matter, the Commission could not order the physical collocation of line card for the reasons set forth in Ameritech Illinois' Application for Rehearing (at pp. 26-27) and its Initial Brief in Docket No. 00-0393 (at pp. 36-41). Specifically, the line card is not a piece of equipment appropriate for collocation because it is only a piece-part or sub-component of a complete item of equipment; and, collocation of a line cards is not "necessary for interconnection or access to unbundled network elements," as required by Section 251(c)(6).

In short, the issue of physical collocation of line cards is beyond the scope of this rehearing and, even if it were within the scope of this rehearing, the Commission should not, and legally cannot, allow such physical collocation of Project Pronto NGDLC line cards by CLECs.

- II. AS A MATTER OF POLICY, AMERITECH ILLINOIS SHOULD NOT BE REQUIRED TO UNBUNDLE PROJECT PRONTO AND PERMIT CLECS TO OWN OR DESIGNATE AND COLLOCATE LINE CARDS IN PROJECT PRONTO NGDLCS.
  - A. ALLOWING CLECS TO OWN OR DESIGNATE AND COLLOCATE LINE CARDS WOULD CREATE SEVERE TECHNICAL AND OPERATIONAL PROBLEMS THAT WOULD MAKE FURTHER DEPLOYMENT OF PROJECT PRONTO IN ILLINOIS ECONOMICALLY UNATTRACTIVE.

In addition to the myriad legal flaws of the Arbitration Decision's line card virtual collocation requirement, that requirement is fundamentally unsound from a policy perspective, as it would serve only to reduce, rather than enhance, investment, innovation, and ultimately competition in the Advanced Services market. Indeed, in the rehearing phase of this docket, Staff's own witness, Mr. Clausen, stressed that the Commission should not impose obligations on Ameritech Illinois that would unduly reduce Ameritech Illinois' incentive to continue deployment of Project Pronto in Illinois. Unfortunately, as the record on rehearing makes clear, the Arbitration Decision's NGDLC line card virtual collocation requirement will have precisely that effect, at least with respect to further deployment of Project Pronto facilities on the end-user "side" of the network designed to support the provision of DSL services.

Among other things, although the Arbitration Decision recognizes that severe operational and technical problems would occur if CLECs were allowed to *physically* collocate Project Pronto NGDLC line cards (and therefore rejected the CLECs' request for such physical collocation), it fails to recognize that these same operational problems would exist even if CLECs were allowed only to virtually collocate line cards. The record on rehearing establishes

that CLEC ownership and collocation (whether physical or virtual) of Project Pronto NGDLC line cards will create severe operational problems, introduce inefficiencies into Ameritech Illinois' network, and cause Ameritech Illinois to incur substantial additional costs, none of which would exist if Ameritech Illinois were simply allowed to own the line cards, as authorized by the FCC's *Project Pronto Order*. As fully explained below, one of the most serious operational problems that would result is the premature exhaust of the NGDLC system itself, both in terms of physical capacity limitations and bandwidth capacity limitations. In addition, a number of serious provisioning and maintenance problems would result if CLECs were permitted to own or designate and collocate their own ADLU line cards.

As a matter of policy, this Commission should be hesitant to impose new regulations in an emerging market – the market for advanced services – that could very well distort market outcomes in an undesirable way, by compelling excessive, technologically inefficient use of one firm's innovation and assets by other market participants. Yet this is exactly what the Arbitration Decision's NGDLC line card virtual collocation requirement does. That requirement would threaten to force Ameritech Illinois to reconfigure the Project Pronto architecture in a manner that would be inefficient, more costly, and ultimately provide no additional benefits to CLECs, consumers or Ameritech Illinois. The operational problems associated with the Arbitration Decision would so dramatically change the economics of Ameritech Illinois' planned deployment of DSL-related Project Pronto facilities that Ameritech Illinois might be forced to forego the further deployment of those facilities in Illinois altogether. While Ameritech Illinois hopes to avoid that result, as noted above, because of the high degree of regulatory uncertainty

surrounding this issue created by the HEPO in Docket No. 00-0393, Ameritech Illinois has suspended further deployment of wholesale DSL-related Project Pronto facilities.<sup>25</sup>

More broadly, to the extent that it reflects the Commission's regulatory approach to efforts by an ILEC to invest in its network to offer new services and enter into new markets, the Arbitration Decision's line card virtual collocation requirement would have a chilling effect on similar investments by Ameritech Illinois and other ILECs, both now and in the future.<sup>26</sup>

1. ALLOWING CLECS TO COLLOCATE LINE CARDS WOULD CREATE PHYSICAL CAPACITY LIMITATIONS THAT LIKELY WOULD RESULT IN PREMATURE EXHAUST OF THE NGDLC SYSTEM.

Allowing CLECs to own or control and collocate Project Pronto ADLU line cards would result in inefficient use of the Project Pronto facilities on the end-user side of the network, which ultimately could cause premature exhaust of the NGDLC system. To fully understand how these inefficiencies would occur, it is necessary to understand the particulars of the equipment deployed with Project Pronto. As the record on rehearing establishes, the NGDLC RT equipment has a limited number of slots to hold line cards. Specifically, in the Alcatel Litespan NGDLC equipment that Ameritech Illinois is deploying in RTs under Project Pronto, each channel bank used for DSL service has 56 slots. The largest cabinet configuration for the Litespan system contains 9 channel banks, 3 of which are capable of supporting DSL service in a fully equipped system. This equates to a maximum of 168 ADLU card slots per RT capable of supporting DSL service. Each slot in turn has 4 ports, totaling a maximum 672 DSL-capable ports per RT. Because each of the line card slots in the RT can serve four individual customer

<sup>&</sup>lt;sup>25</sup> Nonetheless, as indicated above, Ameritech Illinois plans to continue with the POTS only Pronto deployment in Illinois in its ongoing effort to improve service quality.

<sup>&</sup>lt;sup>26</sup> Notably, competing providers of broadband capable architectures (*e.g.* cable modem providers) are not subject to the type of regulatory requirement imposed by the Arbitration Decision. Imposing such a requirement on Ameritech Illinois would ultimately mean one thing—consumers would have fewer choices.

lines, each line card slot has four copper feeder pairs hardwired to it. Am. Ill. Ex. 7.0 (Keown) at 6-7.<sup>27</sup>

Port-by-port ownership or control by different carriers in a NGDLC channel bank assembly is not feasible because each line card contains multiple ports, *i.e.*, the ADLU line card serves multiple end-user customers. Accordingly, under the Arbitration Decision's line card collocation requirement, each CLEC would own and deploy its own set of line cards, and it is highly *un*likely that any CLEC would voluntarily share with other CLECs the ports on a single line card. Rather, each CLEC would reserve the unused slots on each of its line cards solely for its own use. Accordingly, under the Arbitration Decision, ADLU line card ownership would have to be determined and tracked on a line card-by-line card basis.

This type of arrangement is plainly inefficient. If each of many CLECs (which easily could exceed 10 or more CLECs per RT) owned or controlled its own multi-port line cards in a particular RT, and therefore had exclusive use of all the ports on those line cards, but only had one customer in the specific geographic area served by that RT, then the other port capacity of that CLEC's line cards would be unused. In other words, unless all CLECs used all of the ports on each of their collocated line cards (an unlikely scenario)<sup>28</sup>, inefficient utilization of the NGDLC's slot and port capacity would result. Am. Ill. Ex. 7.0 (Keown) at 7-8. In contrast, if Ameritech Illinois owned all the line cards used in its NGDLC RT equipment, as authorized by

<sup>&</sup>lt;sup>27</sup> The ADLU line cards currently manufactured by Alcatel support only 2 DSL ports per line card, which means the current maximum DSL capacity of a Litespan 2000 system is 336 DSL-capable ports. Alcatel is in the process of developing a DSL-capable line card that supports 4 ports.

<sup>&</sup>lt;sup>28</sup> Rhythms and Covad suggest that there is no support for Ameritech Illinois' position that it is unlikely that CLECs will utilize all ports on a line card. Rhythms and Covad are wrong. To the contrary, as testified by Mr. Keown, because all the copper pairs wired to a line card slot would be going to the *same*, *small* serving area, it is unlikely that, in a multiple CLEC environment, any single CLEC would obtain enough customers to utilize all four pairs wired to the line card slot. Tr. at 281. And even if this were not the case, all of the other network inefficiencies introduced by multiple CLEC line card ownership would still exist.

the FCC in its *Project Pronto Order*, this inefficient utilization would not occur, as Ameritech Illinois could assign the next available DSL port to whatever CLEC was then ordering DSL service. In short, Ameritech Illinois would be able to assign ports on the same card to multiple CLECs on a port-by-port basis, and thereby more efficiently manage the port capacity of its NGDLCs. Am. Ill. Ex. 7.0 (Keown) at 12.<sup>29</sup>

The inefficient underutilization of NGDLC slot and port capacity that would result from CLEC ownership and collocation of line cards is critical, because it would limit the number of feeder pairs available for POTS customers (because more channel bank capacity would be occupied by the unused or partially used line cards of multiple CLECs), as well as limit the number of CLECs that could provide DSL service using Project Pronto NGDLCs. The underutilization of the Project Pronto NGDLC RT also would hasten exhaust of the slot capacity of the NGDLC equipment itself. This would be detrimental to all CLECs and the ILEC, because it would create the need for additional capital investments to deploy more NGDLC RTs, and likely cause delays in delivering service to end-user customers associated with the provisioning and installation of those additional NGDLC RTs. Am. Ill. Ex. 7.0 (Keown) at 6-7.

The bottom line is that, if multiple CLECs are permitted to collocate their own line cards (or line cards that they designate) and those CLECs do not use all four of the copper pairs that

<sup>&</sup>lt;sup>29</sup> Attachment JEK-2 to Mr. Keown's Direct Testimony on Rehearing illustrates the maximum number of unused line card ports that would exist under Ameritech Illinois ownership of Project Pronto NGDLC line cards, versus CLEC ownership or control of the line cards. Under this example, assuming that there are 5 SAIs per RT and 3 different types of line cards, Ameritech Illinois ownership of the line cards would result in a maximum of 45 unutilized ports. In contrast, if 5 different CLECs were collocating line cards to provide DSL service throughout the serving area of that RT, the maximum amount of unutilized ports would be 225. Moreover, assuming the existence of the largest cabinet configuration for the Litespan NGDLC RT equipment, even if every port of every slot were fully utilized except the last slot per card type, per SAI, per CLEC, the resulting utilization under Ameritech Illinois ownership of the line cards would be over 93%, compared to less than 67% if the assumed 5 CLECs owned or controlled and collocated line cards in the RT. Although the CLECs claim that this example is the "worst case scenario" (Tr. at 279), in reality this is the worst case scenario *only* if *no more than five CLECs* owned and controlled line cards in the RT and no more than 3 different types of line cards existed. As Mr. Keown explained, this under-utilization problem would be exacerbated as more CLECs owned or controlled and collocated line cards in an RT and as the variety of those line cards increased. Am. Ill. Ex. 7.0 (Keown) at 8-9.

are wired to each line card slot (which is highly likely), there would be inefficient use of the NGDLC slot capacity, and as a result, significantly higher equipment costs per DSL line. This type of network inefficiency and increased costs would not occur if Ameritech Illinois owned the line cards, because Ameritech Illinois could assign multiple CLECs to the same line card on a port-by-port basis. In fact, this is exactly how Ameritech Illinois currently plans to provision its wholesale Broadband Service offerings.

2. ALLOWING CLECS TO COLLOCATE LINE CARDS WOULD CREATE BANDWIDTH LIMITATIONS THAT LIKELY WOULD RESULT IN PREMATURE EXHAUST OF THE NGDLC SYSTEM.

In addition to physical exhaust of the slots in the NGDLC system, CLEC ownership and collocation of line cards would increase the risk of premature exhaust of the system's bandwidth. The most common DSL quality of service (QoS) classes are Constant Bit Rate (CBR), Variable Bit Rate, both real time and near real time (VBR-rt, VBR-nrt), and Unspecified Bit Rate (UBR). The quality of service classes offered over Ameritech Illinois' DSL-related Project Pronto facilities will have a significant impact on the availability of bandwidth. Ameritech Illinois is currently offering UBR quality of service over the Project Pronto DSL-related facilities, and its business plans for deploying Project Pronto assume extensive use of the UBR quality of service. Ameritech Illinois chose to deploy UBR because UBR permits all customers to have an equal chance at the bandwidth resources of the NGDLC, and provides the most efficient use of the shared bandwidth of the NGDLC RT, i.e., it provides access to that shared bandwidth to the greatest number of customers. As Staff's witness, Mr. Clausen, acknowledged, SBC designed its deployment of DSL-related Project Pronto facilities primarily to serve the mass market with high speed Internet access. Staff Ex. 1.0 (Clausen) at 5. Unlike other QoS classes, UBR is ideally suited to serve this purpose. Indeed, UBR allows more customers to be assigned over the

NGDLC and the shared fiber facility than could be assigned under any other quality of service class. Am. Ill. Ex. 7.0 (Keown) at 13; Tr. at 238-239.

In contrast to UBR QoS, CBR and VBR QoSs provide a guaranteed level of service (*i.e.*, a minimum or specific level of "reserved" bandwidth). In other words, in terms of bandwidth allocation within an ATM network, CBR and VBR services are allocated specific levels of bandwidth at the expense of UBR customers. With UBR QoS, the entire bandwidth is available to all customers on a first-come, first-served, "best efforts" basis. However, with CBR or VBR QoS, even though the total amount of bandwidth would remain the same, portions of the bandwidth would be dedicated to certain customers to the exclusion of UBR customers, thereby leaving UBR customers with less bandwidth to share. Am. Ill. Ex. 7.0 (Keown) at 13-14. In light of these differences, it is clear that implementing CBR or VBR QoS on Project Pronto DSL-related facilities would result in a number of adverse consequences on those facilities.

The most serious adverse impact would be on the shared fiber between the RT and the OCD. More specifically, with CBR and VBR QoS, the facility carrying the DSL signal could exhaust the bandwidth capacity of the OC3c before the ports exhaust, which in turn could lead to a negative service impact on those customers using UBR. For example, the OC3c between the RT and the OCD has 155 megahertz of bandwidth. With UBR QoS, approximately 3000 customers can obtain DSL (ADSL) service over an OC3c without negatively impacting the service of any customer. Because the largest cabinet configuration being deployed by Ameritech Illinois in its NGDLC RTs will have a maximum capacity of 672 DSL lines, the OC3c has enough capacity to handle all of those DSL lines. In contrast, with CBR or VBR, each customer is guaranteed a specified amount of bandwidth on the facility. If each CBR or VBR customer is "given" 1.5 megahertz of bandwidth, only 100 lines would be able to share the OC3c facility. In

that case, only about 15% of the DSL slot capacity of the NGDLC RT facility could be used (100/672), as compared to the total capacity useable on a UBR QoS basis. Am. Ill. Ex. 7.0 (Keown) at 14-15. Such inefficient use of Project Pronto NGDLC facilities would make no sense, would create the need for additional capital investments sooner than would otherwise be necessary, and also could result in delays in providing service to end-user customers associated with the provisioning and installation of additional (and otherwise unnecessary) NGDLC facilities. Significantly, as Staff witness Mr. Clausen conceded during cross-examination (Tr. at 131-133), it is only Ameritech Illinois, and no other party, that would bear the risk that these additional (and otherwise unnecessary) investment costs would become obsolete or otherwise stranded.<sup>30</sup>

The record on rehearing establishes that the capacity of the lit fiber running between the NGDLC and the OCD cannot be increased merely by changing the ADLU line card in the Litespan equipment (either the Litespan 2000 NGDLC or the Litespan 2012 NGDLC). Nor would changing the common card that converts the DSL signals from electrical to optical increase the available DSL bandwidth. Am. Ill. Ex. 7.0 (Keown) at 15-16. Although Rhythms and Covad assert that there are different ways for Ameritech Illinois to increase bandwidth across the Project Pronto OCD-to-NGDLC fiber system (purportedly including deploying additional RTs; deploying more Litespan 2012 systems instead of Litespan 2000 systems; purchasing additional equipment to perform wave division multiplexing; and unchaining channel

<sup>&</sup>lt;sup>30</sup> To strike a balance between the bandwidth limitations in the Project Pronto network and the CLECs' desire for new and different services, SBC, in its commitments to the FCC, set forth a framework for implementing additional features and functions of the Project Pronto equipment. These commitments, included, among other things, establishing a collaborative process on identifying the features and functions desired by the CLECs, a process for deploying new features and functions in response to CLEC demands, and deployment of a CBR offering. However, each of these commitments includes a reasonable process for protecting the finite resources of the Project Pronto facilities. Under the Arbitration Decision, there is no such balancing of the interests. Instead, the CLEC is given free reign to seize a disproportionate amount of the finite supply of bandwidth to the exclusion and detriment of Ameritech Illinois and other CLECs.

banks from the OC3c), these options are either technically or economically unattractive. Tr. 389-396.

More specifically, the first two options, deploying additional RTs and utilizing more

Alcatel Litespan 2012 systems instead of Litespan 2000 systems, are very costly. Tr. at 390. It
would be a waste of resources for Ameritech Illinois to deploy additional RTs or additional

Alcatel Litespan 2012 systems when such deployment otherwise would be unnecessary if

Ameritech Illinois were permitted to deploy the DSL-related Project Pronto facilities in the
manner that it contemplates—in other words, if Ameritech Illinois were permitted to determine
whether UBR QoS was primarily utilized rather than the less efficient VBR and CBR QoS

classes. This is especially true given the fact that only Ameritech Illinois would bear the risk that
such additional investment costs would be stranded.

With respect to the third option (wave division multiplexing), the record on rehearing establishes that changing the common card in the Litespan NGDLC system will not enable wave division multiplexing ("WDM") or dense wave division multiplexing ("DWDM"). Rather, to provide WDM or DWDM, Ameritech Illinois would have to purchase additional, costly equipment that would lead to a higher price for the CLECs. Am. Ill. Ex. 7.0 (Keown) at 15-16. Putting aside the cost of this additional equipment, both WDM and DWDM raise issues relating to service provisioning, testing, and test access, all of which would make use of these technologies unattractive or infeasible from Ameritech Illinois' perspective. Tr. at 390.

The fourth option, unchaining channel banks from the OC3c, is equally undesirable to Ameritech Illinois as an economic matter. Although the Litespan NGDLC equipment is capable of supporting more than one OC3c between the RT and the Central Office if the NGDLC channel banks are unchained from the OC3c, such unchaining would require placement of

additional fiber, thereby increasing costs, or using more of the available fibers at the NGDLC RT sites, thereby decreasing the available dark fibers for those CLECs that might want to collocate their own stand-alone equipment at the RT site. In addition, each of these additional OC3c fiber facilities must terminate on the OCD in the central office. These additional fiber facilities would cause the ports on the OCD to exhaust faster, which would require the deployment of more OCDs than otherwise would be necessary, again resulting in higher costs. Am. Ill. Ex. 7.0 (Keown) at 17; Tr. at 392.<sup>31</sup>

In short, UBR QoS is ideally suited for providing high speed Internet access to the mass market, which is the primary purpose for Ameritech Illinois' deployment of DSL-related Project Pronto facilities, and would result in the most efficient use of those facilities. While the introduction of other classes of service is possible, the unlimited and unrestricted introduction of such services could result in premature bandwidth exhaust. Such exhaust would limit the ability of Project Pronto to provide DSL to the mass market or require Ameritech Illinois to upgrade and increase its DSL-related network investment and expenditures much sooner than would otherwise be necessary. Am. Ill. Ex. 7.0 (Keown) at 12. As noted above, it is only Ameritech Illinois that would bear the risk that these additional investments and expenditures would be stranded or otherwise unrecovered. If, as a result, Ameritech Illinois were to conclude that these additional costs and expenditures would potentially render its investment uneconomic, it might justifiably conclude, in Justice Breyer's words, that "the game was not worth the candle" (See

<sup>&</sup>lt;sup>31</sup> For example, if there are 20 RTs in a wire center, chained OC3cs would require 20 OC3c ports at the Central Office OCD. If all the channel banks were unchained in a typical 3 DSL channel bank per RT configuration, 60 OC3c ports would be needed at the OCD. This triples the number of OCD ports that would be needed, and would require additional OCDs to be purchased and installed. The additional OCDs and fibers would add unnecessary and inefficient costs to the services being provisioned over the Litespan architecture. Moreover, as noted previously, if CLECs could offer each customer 1.5 MB CBR or VBR service, each OC3c would have the capacity to carry only about 100 DSL lines. This means that, even if two additional OC3cs and OCDs were added, less than 50% of the available DSL ports at the RT would be utilized. Am. Ill. Ex. 7.0 (Keown) at 17.

*IUB II*, 525 U.S. at 430) and forego any further deployment of DSL-related Project Pronto facilities in Illinois.

3. ALLOWING CLECS TO COLLOCATE LINE CARDS WOULD ADVERSELY IMPACT AMERITECH ILLINOIS' PROVISIONING OF SERVICE TO BOTH CLECS AND END-USERS.

Allowing Rhythms and Covad to own or designate and collocate NGDLC line cards would also adversely impact Ameritech Illinois' provisioning of service to both CLECs and endusers. Specifically, Ameritech Illinois' provisioning intervals for DSL service almost assuredly would be longer if CLECs were permitted to own and collocate NGDLC line cards, as compared to Ameritech Illinois owning the line cards and provisioning Broadband Services in the manner set out in the FCC's *Project Pronto Order*. The record on rehearing establishes that, if CLECs were permitted to own and collocate line cards, the typical provisioning steps would be as follows:

- 1. The CLEC would first identify the end-user customer(s) to be served.
- 2. The CLEC would request "loop qualification" information to determine what facilities were available to serve that end-user customer.
- 3. If a Project Pronto NGDLC was the available serving facility, a collocation application would have to be filed for "slot" space.
- 4. The CLEC would then place an order to ship a line card to Ameritech Illinois.
- 5. Ameritech Illinois would receive the line card from the CLEC.
- 6. Ameritech Illinois would then confirm receipt of the line card with the CLEC.
- 7. Ameritech Illinois would then dispatch a technician to the RT and install the line card for the CLEC.
- 8. Ameritech Illinois would confirm installation of the line card with the CLEC.
- 9. The CLEC would then place a service order to establish service to the end-user

customer.

10. Because Ameritech Illinois' provisioning systems as they exist today would not have knowledge of what line cards were owned or controlled by what CLECs, the service order would have to be handled manually to ensure proper assignment of the DSL service to the CLEC's slot and port.

Once the proper facilities were assigned and the service order completed, confirmation would then be sent back to the CLEC that DSL service can be provisioned to the end-user. Am. Ill. Ex. 7.0 (Keown) at 9-10.

Despite Rhythms' and Covad's unsupported assertions to the contrary, these same steps would exist even if the CLEC were allowed only to designate and virtually collocate the line card, except that Ameritech Illinois, rather than the CLEC, would have to order the line card from the manufacturer. Am. Ill. Ex. 7.0 (Keown) at 10. This is discussed in more detail in Part II.A.6 below.

Requiring Ameritech Illinois to perform these additional provisioning steps each time a CLEC submits a DSL-related service order, merely to satisfy Rhythms and Covad's desire to own and collocate line cards, simply makes no sense. Clearly, performing these additional provisioning steps would not result in any conceivable benefit to CLECs or consumers. Equally clearly, these additional provisioning processes would unnecessarily lengthen Ameritech Illinois' provisioning intervals and costs, which is undesirable from any perspective, be it that of Ameritech Illinois, a CLEC, or an end-user. In contrast, if Ameritech Illinois is permitted to own its NGDLC line cards and provision wholesale Broadband Services in the manner that the FCC's *Project Pronto Order* authorizes and contemplates, Ameritech Illinois can pre-equip its NGDLC

equipment to support whatever wholesale DSL services that it provides, thereby improving service provisioning flows and intervals. Am. Ill. Ex. 7.0 (Keown) at 12.

### 4. ALLOWING CLECS TO COLLOCATE LINE CARDS WOULD CREATE SERIOUS SERVICE MAINTENANCE AND REPAIR PROBLEMS

In addition to the economic, operational and provisioning problems described above, allowing Rhythms and Covad to own or designate and virtually collocate line cards likely would create serious service maintenance and repair problems. More specifically, CLEC ownership or control of line cards would add a new challenge and unnecessary complexity to the maintenance and repair process. In the case of the ADLU line card used in the Litespan NGDLC equipment, and indeed, in the case of most NGDLCs, ADSL is the only DSL service that currently is available. With ADSL, if the CLEC provides only the data service, Ameritech Illinois would be the POTS provider. Since both the voice signal and the data signal travel together over the same copper subloop from the end user to the ADLU card, a defective ADLU card can create service problems either in the voice path or the data path. If the ADLU line card needs to be changed, the CLEC would have to provide a maintenance spare to change out the defective line card. Tracking these maintenance spares would place undue responsibility on Ameritech Illinois. This would become particularly onerous if multiple CLECs with various types of line cards were to collocate them in Ameritech Illinois' NGDLC RTs. Ameritech Illinois' maintenance and repair technicians would be required to identify the owner or designator of the line card, determine whether that owner or designator had provided a maintenance spare, locate that spare, or place a call or order to the owner or designator to provide a spare. This likely would increase the mean time to repair on both the POTS side and the data side of the end-user's service, which would mean longer out-of-service conditions, greater customer dissatisfaction, and a greater number of service-related complaints to this Commission. Am. Ill. Ex. 7.0 (Keown) at 10-11.

It is important for the Commission to recognize that the potential problem that Ameritech Illinois would face on the maintenance and repair front does not involve merely tracking and locating one type of spare line card for a single CLEC. Rather, the problem would involve tracking and resolving these repair and maintenance issues for multiple CLECs with multiple types of line cards that they may have collocated in Ameritech Illinois' NGDLCs RTs. To manage the shipping and handling of the volume of line cards to thousands of possible RT locations for multiple CLECs would be a massive and unreasonable burden to place on Ameritech Illinois. Am. Ill. Ex. 7.0 (Keown) at 11. 32 The potential magnitude of these maintenance and repair problems provides yet another compelling reason for the Commission to reverse its original NGDLC line card virtual collocation requirement and instead allow Ameritech Illinois to own the NGDLC line cards and provision wholesale Broadband Services as contemplated by the FCC in the *Project Pronto Order*.

5. ADOPTION OF THE ARBITRATION DECISION'S PROJECT PRONTO-RELATED REQUIREMENTS WILL MAKE DEPLOYMENT OF PROJECT PRONTO IN ILLINOIS UNATTRACTIVE AND WOULD DISCOURAGE FUTURE INVESTMENT IN ILLINOIS.

As described above, adoption of the Arbitration Decision's Project Pronto NGDLC line card collocation requirement would threaten to force Ameritech Illinois to deploy and use its DSL-related Project Pronto facilities in a manner that it did not intend and, more importantly, in a manner that would be costly and inefficient. While Ameritech Illinois has started deployment of Project Pronto DSL-related facilities in Illinois, it has not yet done so on a widespread or significant basis. Accordingly, the Arbitration Decision's NGDLC line card virtual collocation requirement will have much less of an impact on Ameritech Illinois' *existing* network than it will

<sup>&</sup>lt;sup>32</sup> Additionally, if Ameritech Illinois is allowed to own the Project Pronto NGDLC line cards, service problems of one CLEC will be less likely to interfere with service of any other CLEC. Am. Ill. Ex. 7.0 (Keown) at 12.

have on Ameritech Illinois' decision whether to invest in the further deployment of DSL-related Project Pronto facilities in Illinois. The type of investment that Ameritech Illinois plans to make in these DSL-related Project Pronto facilities only makes sense when the investing company has the ability to configure its offering in the most efficient way possible and obtain a marketrequired return on the investment. Am. Ill. Ex. 8.0 (Chapman) at 11. Indeed, one of Ameritech Illinois' incentives for investing in Project Pronto is the efficiencies that can be gained in the Project Pronto network. Am. Ill. Ex. 8.1 (Chapman) at 2. The Arbitration Decision, however, improperly requires Ameritech Illinois to invest in a manner that suits the CLECs' business plans, regardless of the financial consequences to Ameritech Illinois and its investors. Instead of encouraging CLECs to invest in their own facilities, the Arbitration Decision sends CLECs the economically inefficient message that they can direct how Ameritech Illinois will invest in its facilities. It also would require Ameritech Illinois to bear all the risks associated with that investment, while giving the CLECs the ability to determine how the investment is made. The Commission's NGDLC line card virtual collocation requirement, unless eliminated, will only discourage, instead of encourage, Ameritech Illinois' continued investment in DSL-related Project Pronto facilities. Am. Ill. Ex. 8.0 (Chapman) at 11; Am. Ill. Ex. 8.1 (Chapman) at 2.

CLECs should not be allowed to control the nature of Ameritech Illinois' investments without sharing in the risks of those investments. As noted above, efficiency is a key driver of Ameritech Illinois' deployment of Project Pronto facilities and is captured in Ameritech Illinois' current Broadband Services price structure. Introducing inefficiencies into the network (as the Arbitration Decision's Project Pronto requirement would do) would increase Ameritech Illinois' cost of deploying these facilities and, as a result, the prices of the Broadband Service, or of the new Project Pronto UNEs provided in lieu of the Broadband Service, also would increase. The

increased deployment costs not only would increase Ameritech Illinois' investment risk, it also may, by virtue of the resulting higher pricing, make the Broadband Service and new Project Pronto UNEs less attractive to CLECs.<sup>33</sup> The higher prices may cause fewer CLECs to purchase the UNEs or the service, which, in turn, means that Ameritech Illinois would run a higher risk of being unable to recover its cost of deploying these facilities.

This problem is not resolved by the fact that Ameritech Illinois still would be able to charge TELRIC prices for the Broadband Service or the new Project Pronto UNEs, albeit higher TELRIC prices. As a preliminary matter, the current TELRIC methodology does not necessarily guarantee that Ameritech Illinois would recover the additional deployment costs that it would incur under the Arbitration Decision. As Ameritech Illinois and other ILECs have argued, the FCC's TELRIC methodology does not permit an ILEC to recover all of its actual costs. That issue is currently pending before the U.S. Supreme Court. Moreover, the FCC's current TELRIC methodology (which the Eighth Circuit has held violates the plain language of the 1996 Act), if it is ultimately upheld by the Supreme Court, would not allow Ameritech Illinois to recover certain costs caused by inefficiencies engineered into the network or ineffective use of the capacity of the network.<sup>34</sup>

In addition, even assuming that Ameritech Illinois were permitted to establish Broadband Services and UNE prices at a level that would provide it with an *opportunity* to recover all of the increased costs that would flow from the Arbitration Decision's Project Pronto requirement, there is still a strong likelihood that Ameritech Illinois would not recover its costs. Indeed, in

<sup>&</sup>lt;sup>33</sup> Significantly, Staff witness Mr. Clausen agrees that Ameritech Illinois' investment risk and ability to generate a return on its Project Pronto investment would be impacted if the Commission were to create a CLEC right to virtually collocate line cards. Tr. at 108-109.

<sup>&</sup>lt;sup>34</sup> Of course if this were to occur, it is Ameritech Illinois' position that it would be entitled, under the takings clause of the U.S. Constitution, to recover any costs attributable to regulatorily-imposed network inefficiencies.

light of the higher prices that would result from including the cost of the inefficiencies in the rates, it remains to be seen how many CLECs, if any, would purchase the new Project Pronto UNEs or the Broadband Service. As Staff witness Mr. Clausen testified, Ameritech Illinois cannot recover its costs unless the CLECs actually purchase the UNEs or the service, and the CLECs bear no obligation or requirement to do so. Tr. at 101, 132-34. If significant numbers of CLECs decide not to order the UNEs or the service at all, Ameritech Illinois' investment would be stranded. Because CLECs are under no obligation to use the Project Pronto facilities that Ameritech Illinois deploys, there is no guarantee that they will use it sufficiently enough for Ameritech Illinois to recover its costs, especially in a competitive market such as the Advanced Services market, where a variety of technologies compete.

The bottom line is that the Arbitration Decision's line card collocation requirement creates a serious disincentive for Ameritech Illinois to further deploy DSL-related Project Pronto facilities in Illinois. Indeed, if Ameritech Illinois is unable to configure and deploy those facilities efficiently and receive a market-required return on its investment, there would be no sound business reason for it to continue its deployment. Moreover, the message sent by the imposition of costly and inefficient conditions on a voluntary offering in a new market—in which Ameritech Illinois has no monopoly power—will discourage Ameritech Illinois and other ILECs from making this type of substantial investment in the future. Instead of investing in an architecture that will benefit competitors equally, telecommunications companies like SBC will be incented to invest in such new technologies only where the regulatory climate is more hospitable. If ILECs are discouraged from investing in innovative new network architectures, this could result in depriving end users of another choice to access new advanced services technologies and could decrease the availability of an alternative platform for advanced services

providers to access the mass market. Am. Ill. Ex. 8.0 (Chapman) at 11. Although Ameritech Illinois does not believe such a result is desirable, the alternative of putting the company and its investors at risk is even less desirable.

Rhythms and Covad attempt to discount and cast aspersions on Ameritech Illinois' statements that regulatory burdens could cause it to cease further deployment of DLS-related Project Pronto facilities in Illinois by characterizing Ameritech Illinois' statements as mere threats. This simply is not the case. Notwithstanding Covad and Rhythms' pejorative rhetoric, Ameritech Illinois' statements to this effect are not threats but a reality of the business world, where all companies, including Rhythms and Covad, must consider the economic interests of their investors. Ameritech Illinois' decision whether to deploy DSL-related Project Pronto facilities necessarily must be based on a careful analysis of the applicable economic factors, and is no different, in economic terms, than the analysis that Covad or Rhythms must undertake when deciding whether to purchase a particular type of DSLAM or deploy a DSLAM in a particular location. Indeed, no rational business enterprise will continue investing in a product or service if doing so is rendered burdensome and uneconomic, as the Arbitration Decision's Project Pronto requirement threatens to do to Ameritech Illinois' deployment of DSL-related Project Pronto facilities. The Arbitration Decision requires a different use for these DSL-related Project Pronto facilities than Ameritech Illinois contemplated when it made its initial investment decision, and substantially increases the risk of the investment.<sup>35</sup> Accordingly, Ameritech Illinois and SBC must reconsider whether continued investment in the DSL-related Project Pronto facilities in Illinois is operationally and economically reasonable. At this point, in light of

<sup>&</sup>lt;sup>35</sup> Ameritech Illinois is willing and wants to make significant investments in Illinois. It does not want to be prevented from doing so by regulatory requirements that alter the parameters surrounding such investment. SBC worked with the FCC and the CLECs during the Project Pronto Waiver Proceeding and developed a detailed set of

the HEPO in Docket No. 00-0393, Ameritech Illinois and SBC have placed further deployment of Project Pronto DSL facilities in Illinois on hold as it makes this evaluation.

Rhythms and Covad also assert that, because SBC at one time considered offering the DSL-related Project Pronto facilities as UNEs and allowing CLECs to own line cards, Ameritech Illinois would go forward with its investment in those facilities even if it had to unbundle them and allow CLECs to own line cards.<sup>36</sup> This assertion is illogical and, in fact, the opposite is true. During the development of the Broadband Service and based upon the requests of the CLEC community, SBC did consider and evaluate a number of different deployment strategies for the DSL-related Project Pronto facilities, including CLEC ownership of line cards. This careful evaluation was consistent with SBC's desire to develop a Broadband Service offering that was attractive to its wholesale customers while, at the same time, ensuring that SBC's investment still made good business sense. In large part for the reasons explained in Parts II.A.1 through II.A.4 above, this evaluation revealed that providing the DSL-related Project Pronto facilities in an unbundled manner and allowing the CLECs to own line cards was unworkable and impracticable, due to the economic and operational problems that would result.<sup>37</sup>

conditions which sought to balance the various parties interests. It is not fair or reasonable at this point to change these carefully crafted conditions.

<sup>&</sup>lt;sup>36</sup> Rhythms and Covad also assert that Ameritech Illinois' October 15, 1999 investor briefing establishes that maintenance savings alone provide an economic justification for Ameritech Illinois' continued investment in and deployment of DSL-related Project Pronto facilities. This assertion mischaracterizes the savings that Ameritech Illinois expects to achieve. As a preliminary matter, the investment in Project Pronto will be offset by a combination of maintenance expense savings and capital savings. Additionally, the maintenance expense savings do not primarily involve savings involving the planned deployment of DSL-related facilities. Rather, those anticipated savings primarily relate to the interoffice network facilities of Project Pronto. In any event, the savings that Ameritech Illinois anticipates as a result of deploying the DSL-related Project Pronto facilities is a product of Ameritech Illinois deploying that network in the efficient manner Ameritech Illinois has contemplated all along, not as the CLECs wish for it to be deployed. Tr. 340-342.

<sup>&</sup>lt;sup>37</sup> Significantly, SBC sought the waiver from the FCC in part because of the economic and operational problems that would result from CLEC ownership and control of ADLU line cards.

Rhythms' and Covad's effort to mischaracterize SBC's attempt to better meet its customer needs, by claiming that the very act of considering the alternatives requested by the CLECs meant that SBC could economically justify its continued investment in DSL-related Project Pronto facilities consistent with these requests, is both an attempt to distort the facts and an obvious *non sequitur*. Merely considering and evaluating a potential alternative means of deploying facilities does not prove that it is economically and operationally sensible to do so. To the contrary, the very purpose of the evaluation was to determine the economic and operational sensibility of the proposed option.

In this rehearing, the Commission is in a unique position to either encourage or discourage Ameritech Illinois' investment in new technologies serving new telecommunications markets. The FCC has recognized the importance of encouraging incumbent LEC investment in network initiatives that will support Advanced Services, stating, "We are also committed to ensuring that incumbent LECs are able to make their decisions to invest in, and deploy, advanced telecommunications services based on market demand and their own strategic business plans, rather than on regulatory requirements. We intend to take deregulatory steps towards meeting this goal in a subsequent order." The FCC went on to state, "We intend to address, in a future order, other specific forms of regulatory relief that may be needed to stimulate investment and deployment of advanced services by incumbents or new entrants, or whether other changes to the Commission's local competition rules may facilitate deployment of advanced services by competing carriers." Am. Ill. Ex. 8.1 (Chapman) at 5.

 $<sup>^{38}</sup>$  Deployment of Wireline Services Offering Advanced Telecommunications Capability, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 98-147,  $\P$  3.

 $<sup>^{39}</sup>$  *Id.* at ¶ 7.

As it stands, the Arbitration Decision's Project Pronto requirement directly contradicts the FCC statements. This decision subjects Ameritech Illinois' to new and ever-broadening regulatory requirements; prevents Ameritech Illinois from making investment decisions based upon its own business plans; and discourages future investment by making such investments unattractive. Am. Ill. Ex. 8.0 (Chapman) at 2-5. As noted by Staff witness Mr. Clausen, the Commission's decision on this issue should not "unduly reduc[e] Ameritech's incentive to roll out Project Pronto in Illinois." Tr. 95-96; Staff Ex. 1.0 (Clausen) at 2. Accordingly, the Commission should revise its decision as proposed by Ameritech Illinois, thereby allowing Ameritech Illinois to deploy and operate the DSL-related Project Pronto facilities in the economical and efficient manner for which they were intended.

6. THE OPERATIONAL AND TECHNICAL PROBLEMS ASSOCIATED WITH THE ARBITRATION DECISION'S PROJECT PRONTO REQUIREMENT WILL RESULT EVEN THOUGH THAT REQUIREMENT ONLY PERMITS CLECS TO DESIGNATE AND VIRTUALLY COLLOCATE THE NGDLC LINE CARDS.

Rhythms and Covad assert, without any evidentiary basis, that the operational and technical problems described in Parts II.A.1 through II.A.4 above will not occur if CLECs are allowed to only virtually collocate line cards. However, as noted previously, the record establishes that these operational and technical problems would not be eliminated under the Arbitration Decision's Project Pronto requirement. Among other things, Ameritech Illinois has never provided a virtual collocation offering under which Ameritech Illinois, rather than the CLEC, possessed legal title to the equipment being collocated. And most importantly, the issue of title ownership is a red herring. None of the operational and technical problems associated with the Arbitration Decision's line card virtual collocation requirement depend on whether Ameritech Illinois technically obtains legal title of those line cards. Rather, it is the CLECs' exclusive use and control of the line cards being placed in Ameritech Illinois' Project Pronto

NGDLCs that cause the capacity, provisioning and maintenance problems discussed above. Accordingly, none of the problems identified above would be eliminated by the Arbitration Decision's requirement that CLECs only virtually collocate line cards.

More specifically, even if Ameritech Illinois technically obtained legal title to the CLECs' virtually collocated line cards, the risks of premature exhaust of the slot capacity of the NGDLC and of bandwidth capacity would remain the same. Indeed, under such circumstances, Ameritech Illinois still could not assign multiple CLECs to the virtually collocated card, as it would be able to do in the absence of the Arbitration Decision's collocation requirement.

Indeed, for all practical purposes, the line card still would be reserved for the exclusive use of the CLEC who requested virtual collocation of the card. Again, if the CLEC did not use all four of the copper pairs wired to each of its line cards, there would be less efficient utilization, and hence higher costs per DSL line. The resulting inefficiencies also would limit the number of available DSL lines and hasten the exhaust of the NGDLC equipment. The exhaust situation would become increasing worse as more and more CLECs virtually collocated more and more line cards.

Similarly, with respect to DSL-related service and UNE provisioning, Ameritech Illinois would still be required to engage in the steps outlined in part II.A.3 above. Specifically, Ameritech Illinois would have to dispatch a technician to the remote terminal and install a line card for every CLEC each time a CLEC requested virtual collocation. If, on the other hand, Ameritech Illinois owned and controlled the line cards in the manner contemplated by the FCC's *Project Pronto Order*, the line cards could be pre-provisioned, and Ameritech Illinois would then only need to provision the service over that card. Tr. at 284. Although technicians obviously

<sup>&</sup>lt;sup>40</sup> Because line cards have to be dedicated to particular SAIs, it is unlikely that any CLEC will preprovision ADLU cards in an appreciable quantity.

would have to be dispatched when the existing line card capacity is filled even where Ameritech Illinois owns and controls the line cards (Tr. at 284), the number of trips would be significantly greater if the CLECs owned the line cards, because Ameritech Illinois would have to dispatch a technician each time a CLEC desired to virtually collocate a line card. Tr. at 301. The number of trips would only increase as more and more CLECs requested collocation of more and more line cards. It is also significant that, because end user customers move and change service providers, the number of trips to rearrange the cards at the NGDLC or replace one CLEC's card with another CLEC's card would increase.

The maintenance problems identified in Part II.A.4 above also would continue under the Arbitration Decision's virtual collocation requirement. Indeed, if a virtually collocated ADLU line card needs to be changed, Ameritech Illinois would still have to track spares, identify the designator of the line card, determine whether the designator had provided a spare, locate that spare, or place a call or order to the designator to provide a spare. As described above, this likely would increase the mean time to repair on both the POTS side and the data side of the end-user customer's service, which means more time out of service. Additionally, as noted above, there would likely be increased network troubles, because Ameritech Illinois would have to add or change line cards for CLECs as often as end user customers change their data service providers.

Am. Ill. Ex. 7.1 (Keown) at 5. Again, these maintenance problems would only become greater as more and more CLECs virtually collocate more and more line cards.

In sum, virtual collocation of the Project Pronto NGDLC line cards will not eliminate any of the operational and technical problems identified by Ameritech Illinois. If, on the other hand, Ameritech Illinois were allowed to own and control the Project Pronto NGDLC line cards in the manner contemplated by the FCC in the *Project Pronto Order*, the DSL-related Project Pronto

facilities will be used in the most efficient and economical manner, and none of the operational and technical problems identified above would exist. Accordingly, the Commission should revise its Arbitration Decision and eliminate its Project Pronto NGDLC line card virtual collocation requirement.

B. DEPLOYMENT OF THE DSL-RELATED PROJECT PRONTO FACILITIES AND THE ASSOCIATED BROADBAND SERVICE OFFERING IN THE MANNER CONTEMPLATED BY THE FCC AND BY AMERITECH ILLINOIS IS BENEFICIAL TO CLECS, CONSUMERS, AMERITECH ILLINOIS AND THE PUBLIC AT LARGE.

An important fact about Ameritech Illinois' planned deployment of the DSL-related Project Pronto facilities and the Broadband Service Offering (which the CLECs have swept under the rug) is that CLECs, consumers, Ameritech Illinois and the public at large will benefit from the new facilities and service offerings in significant ways. With respect to CLECs, as the FCC has recognized, Ameritech Illinois' planned deployment of those facilities and the associated Broadband Services offering clearly creates new business opportunities for CLECs. Project Pronto Order, ¶ 23, 28. The Broadband Services offering is available on identical terms to all CLECs, including Ameritech Illinois' data affiliate, and allows data CLECs to reach millions of customers that could not be reached efficiently or economically before. *Id.* The Broadband Services offering also reduces the amount of up-front capital required for a CLEC to begin providing DSL service to a new community by minimizing the amount of collocation required and eliminating the need to purchase DSLAMs. In addition, and perhaps most importantly, as Mr. Clausen conceded during cross-examination (Tr. 110-112), and as the FCC has found (*Project Pronto Order* at ¶¶ 23, 28), Ameritech Illinois' planned deployment of the DSL-related Project Pronto facilities and the associated Broadband Services offering will give CLECs a new, additional option for providing DSL service. Moreover, data CLECs will retain all of the existing options available today for providing such data services, including obtaining

xDSL-capable stand-alone copper loops, FCC-defined line sharing, and sub-loop unbundling. *Id.* In short, *the CLECs lose nothing but gain access to a previously unavailable market*. This new market opportunity is particularly important to DSL service providers. In today's current market, the availability of cable modems far surpasses the availability of DSL technologies. The type of network investment represented by Ameritech Illinois' planned deployment of the DSL-related Project Pronto facilities will encourage the continued growth and development of DSL-based technologies. Am. Ill. Ex. 8.0 (Chapman) at 12-14.

Ameritech Illinois' planned deployment of these facilities and the associated Broadband Services offering. Instead, they make several baseless complaints about the Broadband Services Offering. Specifically, Rhythms and Covad assert that, in the absence of the Arbitration Decision's Project Pronto requirement, the following will occur: (1) CLECs somehow will be competitively harmed; (2) the rapid deployment of advanced services will be hindered; (3) consumer choices will be limited; and (4) CLECs will be unable to differentiate their product offerings. The FCC, however, has found that the exact opposite is true in each case. In the *Project Pronto Order*, the FCC stated "we expect consumers will benefit not only from a more rapid deployment of advanced services, but from the increased choices that stem from the competitive safeguards contained in SBC's proposal." The FCC went on to conclude that "SBC's proposal serves the public interest" and "should provide consumers a greater choice of both services and providers in the near term". The FCC went on to say, "In particular, we find that SBC's proposal should affirmatively and identifiably promote the rapid deployment of advanced services in a pro-

<sup>&</sup>lt;sup>41</sup> Project Pronto Order at  $\P$  2.

<sup>&</sup>lt;sup>42</sup> Id. at ¶ 23.

competitive manner, thereby serving the goals of section 706." Finally, the FCC stated, "Our approval of SBC's request subject to its pro-competitive commitments . . . paves the way for Rhythms and other carriers to compete for those customers [who would not be able to receive DSL service without Project Pronto]. SBC's commitments will facilitate Rhythms' access to remote terminals and enable Rhythms and others to differentiate their product offerings from those of SBC's Advanced Services Affiliate."

Although the various commitments made by Ameritech Illinois in exchange for being permitted by the FCC to own and control the NGDLC line cards create additional benefits to CLECs that would not exist absent Project Pronto, Rhythms and Covad attempt to distort those benefits. To provide one example, under the FCC-adopted commitments and the *Project Pronto Order*, Ameritech Illinois has agreed not to retire, through September 2001, any central office-terminated copper loops overlaid by the Project Pronto architecture, except as required by acts of God. Additionally, Ameritech Illinois is prohibited through September 2003 from using its retirement policy to retire more than 5% of its total CO-terminated copper loops in service as of September 1, 2000. The CLECs nevertheless complain that Ameritech Illinois has no restrictions from retiring its copper plant after 2003. The fact of the matter is that Ameritech Illinois has previously *never* had *any* of these types of restrictions on retirement of its plant. This new commitment, as well as the other commitments made by SBC's ILECs, provides CLECs with benefits that they would not otherwise enjoy absent Project Pronto.

Ameritech Illinois' planned deployment of DSL-related Project Pronto facilities also will have a substantial beneficial impact on the public in Illinois and elsewhere. Large network

<sup>&</sup>lt;sup>43</sup> *Id*.

<sup>&</sup>lt;sup>44</sup> *Id*. at 28.

investments, such as Ameritech Illinois' planned investment in these facilities, equate to additional jobs. These jobs include the Ameritech Illinois employees who implement the deployment of those facilities as well as the employees of the various vendors, suppliers and contractors supporting that deployment. The deployment of these facilities also will provide consumers (as well as advanced services providers) with additional DSL service choices that are not available today. It also will enable more schools to access the broadband services that are becoming increasingly important in today's technological society. It will promote telecommuting, which opens up many previously unavailable opportunities to the disabled and homebound, as well as providing benefits to the environment through decreased need for commuting. This is precisely the kind of investment the 1996 Act envisioned and sought to encourage. Am. Ill. Ex. 8.0 (Chapman) at 12-13.

Ameritech Illinois also expects to benefit from its planned deployment of the DSL-related Project Pronto facilities. This is an unsurprising and basic economic and business fact, given that Ameritech Illinois is the party making the investment in those facilities. Rhythms and Covad nevertheless attempt to suggest that any benefit that Ameritech Illinois derives from its investments is somehow improper or will impede the CLECs ability to compete. This is both baseless and wrong. As with any other business, Ameritech Illinois is subject to the basic rules of economics. And as noted above, the Advanced Services market is a competitive market in which Ameritech Illinois does not have any type of monopoly power. Clearly, Ameritech Illinois must have the opportunity to benefit from the investments that it makes in that market, otherwise it would have no economic basis for making those investments. Moreover, there is no reason for Ameritech Illinois to raise impediments to its CLEC customers' provision of DSL services. Indeed, the benefits Ameritech Illinois stands to derive from its planned deployment of

the DSL-related Project Pronto facilities are a direct result of its success in providing wholesale Broadband Services to its CLEC customers. Ameritech Illinois does not provide any retail DSL services. Rather, the Broadband Service Offering is a wholesale offering to CLEC customers. Accordingly, it is in Ameritech Illinois' best interest to make the Broadband Service offering as appealing as possible to CLECs, otherwise Ameritech Illinois would risk adversely affecting the profit potential of the DSL-related Project Pronto facilities. It is clear that Ameritech Illinois has every incentive to assist CLECs in the efficient utilization of Ameritech Illinois' planned DSL-related network facilities and the introduction of new DSL-related capabilities into Ameritech Illinois' network. It simply would not make economic sense, and would defeat the purpose of deploying the DSL-related Project Pronto facilities, for Ameritech Illinois to do otherwise. Am. Ill. Ex. 8.2 (Chapman) at 1-5.

C. AMERITECH ILLINOIS' PLANNED DEPLOYMENT OF DSL-RELATED PROJECT PRONTO FACILITIES DOES NOT LIMIT THE TECHNOLOGY, CONFIGURATION AND TYPES OF DSL SERVICES THAT CLECS COULD OTHERWISE USE.

In support of retaining the Arbitration Decision's Project Pronto requirement, Rhythms and Covad assert a need for various "flavors" of DSL. As a preliminary matter, the issue of different DSL "flavors" is not an issue involving the HFPL UNE established by the FCC in its *Line Sharing Order*. Am. Ill. Ex. 6.0 (Lube) at 36-37. Specifically, some of the types of DSL service that Rhythms and Covad apparently want to be able to provide using their own line cards in Ameritech Illinois' Project Pronto NGDLC equipment cannot even be used in a HFPL line sharing arrangement as defined by the FCC. FCC-defined line sharing can occur only with a limited number of types of DSL, including ADSL, G.lite, and RADSL. For example, Rhythms and Covad have suggested that they want to use their own line cards to provide SDSL and HDSL. As the FCC recognized in its *Line Sharing Order*, neither of these DSL services can be

line-shared over the HFPL. Am. III. Ex. 6.0 (Lube) at 36-37. Accordingly, Rhythms and Covad's desire to provide such DSL service "flavors" over Ameritech Illinois' planned DSL-related Project Pronto facilities is irrelevant. Indeed, this rehearing involves an arbitration regarding the *HFPL*, *not DSL services generally*.

Moreover, the CLECs cannot get various "flavors" of DSL by using one vendor's line card in another vendor's NGDLC. Ameritech Illinois' vendor, Alcatel, has stated:

"Only line cards supplied by Alcatel for Litespan or provided under license can be installed and used in Litespan systems. As noted above, these are software-controlled systems. The software enables the service delivery and maintenance functions. The software is copyright protected and distributed only under restricted license provisions that prohibit use or modification by others. In addition, each line card is designed to mechanical and electrical specifications that ensure they do not interfere with other services or the performance of the system. Accordingly, the installation of other line cards is precluded by contract warranty provisions designed to ensure reliable service and system performance."

*See* Am. Ill. Ex. 7.0 (Keown), Attachment JEK-3. In addition, in their comments filed in response to a pending FCC FNPRM proceeding, Alcatel states:

"As a line card manufacturer, Alcatel recognizes that it would <u>not</u> be feasible or practical to develop line cards that could be used in a multiplicity of other systems, even if there were no backplane or software access restraints. There must be several dozen (or more) system and software vintages in the country. The combination of mechanical and software requirements that would have to be met would be overwhelming. Likewise, it would be just as difficult for other manufacturers to develop line cards for the many vintages of Alcatel's systems and software releases (if the software were even accessible) along with others."<sup>45</sup>

Nortel Network filed similar comments in the same FCC FNPRM proceeding. Specifically, Nortel stated:

"The DLC market has evolved without industry standards having been developed to allow interchangeability of line cards. Moreover, Nortel Networks is not aware of any effort underway to attempt to develop such industry standards. Without standards, it would be virtually impossible to use different manufacturers' line cards in a single DLC. Finally, given the vast differences in

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<sup>&</sup>lt;sup>45</sup> Alcatel's comments in FNPRM CC Dockets 98-147 and 96-98; filed October 12, 2000.

technologies used by different manufacturers and the rapidly evolving nature of those technologies, it would be very difficult, if not impossible, to develop industry standards without thereby stifling technological development."

See Am. Ill. Ex. 7.0 (Keown) at 19. Comments of Nortel Networks Inc., in CC Docket Nos. 98-147 and 96-98; filed October 12, 2000, page 4.

Despite the above representations made by manufacturers, Rhythms suggests that it is technically feasible for other manufacturers to build line cards compatible with the Project Pronto NGDLC systems that Ameritech Illinois plans to deploy. There is no factual basis for this assertion. To the contrary, the record establishes that only the NGDLC manufacturer's line cards can be used in its NGDLC equipment. As alluded to above, this is primarily because these NGDLC systems are software-driven, and each manufacturer's software is proprietary. Am. Ill. Ex. 6.0 (Lube) at 39. Rhythms further suggests (Rhythms Ex. 7.1 (Riolo) at 11-12) that this Commission or the FCC can, and should, require manufacturers to open their proprietary software and specifications internal to their equipment products, to allow such supplier competition. That assertion is preposterous and wrong. Neither this Commission nor the FCC has the legal authority or jurisdiction to mandate such action. Perhaps more importantly, several NGDLC manufacturers have clearly expressed that the type of line card interoperability proposed by the CLECs is neither appropriate nor practical. Am. Ill. Ex. 6.2 (Lube) at 18-21.

In any event, Rhythms and Covad's asserted concerns about obtaining different "flavors" of DSL and not being able to "differentiate" their DSL product offerings are baseless. The Project Pronto NGDLCs manufactured by Alcatel can currently support ADSL and a TDM version of HDSL. In the future, Alcatel is expected to offer HDSL-2 (TDM), g.SHDSL and

<sup>&</sup>lt;sup>46</sup> Significantly, Rhythms' witness Mr. Riolo was unable to identify any document generated or produced by either Alcatel or Advanced Fiber Communications where they have indicated a willingness or a plan to cross-license their NGDLC line card technology with other vendors. Tr. at 569.

G.Lite DMT (See Attachment JEK-3). Am. Ill. Ex. 7.0 (Keown) at 17-18. In fact, Ameritech Illinois has committed to making G.lite available on an RT-by-RT basis starting within six months after development and commercial availability from Alcatel. Am. Ill. Ex. 6.0 (Lube) at 37-38. Ameritech Illinois also has committed to conduct collaborative discussions with the CLECs and equipment manufacturers to address future types of DSL service that may be supported over the Project Pronto network. Am. Ill. Ex. 6.1 (Lube) at 5. Clearly, different "flavors" of DSL will be available with Ameritech Illinois' Broadband Service Offering and CLECs will have input on future developments.

In this same vein, Rhythms and Covad's claim that the Broadband Service offering will not allow for sufficient product differentiation by CLECs is not supported by the record and, in fact, has been rejected by the FCC. *See Project Pronto Order*, ¶ 23, 28. The record establishes that, under the Broadband Service Offering, CLECs have the ability to differentiate their retail DSL products from other CLEC's retail DSL products. Indeed, every CLEC will have access to all features and functions, both present and future, actually deployed with Project Pronto NGDLCs available through the Broadband Service at the same time and under the same terms and conditions. Ameritech Illinois also intends to make new features and functions available in the Project Pronto architecture, so that additional services can be offered by the CLECs in the future. Moreover, under Ameritech Illinois' Broadband Service offerings, even the current ADSL capabilities of the Project Pronto architecture can be offered by CLECs with different combinations of upstream and downstream speeds. Am. Ill. Ex. 6.0 (Lube) at 38-39; Ex. 6.1 (Lube) at 12; Ex. 6.2 (Lube) at 36. As the FCC recognized in the Project Pronto Order, the Broadband Service Offering allows for a variety of different combinations of upstream and

downstream data speeds.<sup>47</sup> Therefore, DSL product differentiation is already available to all data CLECs on a nondiscrminatory basis through the Broadband Service.<sup>48</sup>

As noted above, the FCC already has rejected Rhythms and Covad's assertions about their alleged inability to differentiate their product offerings in the *Project Pronto Order*. Specifically, the FCC found:

Our approval of SBC's request subject to its pro-competitive commitments . . . paves the way for Rhythms and other carriers to compete for those customers [who would not be able to receive DSL service without Project Pronto]. SBC's commitments will facilitate Rhythms' access to remote terminals and enable Rhythms and others to differentiate their product offerings from those of SBC's Advanced Services Affiliate.

Id., para. 28 (emphasis added). The FCC emphasized that the SBC ILECs' commitments will "help ensure that consumers will have a wide array of choice[s]" because SBC will "mak[e] available all features, functions, and capabilities of the equipment installed in remote terminals at just, reasonable, and nondiscriminatory rates, terms, and conditions." Id., para. 42. "By unleashing the full potential of the [Project Pronto] equipment," the FCC found, "SBC's commitment will help competitive LECs provide innovative, exciting new services" and enable CLECs to "compete more effectively against SBC by differentiating their product offerings."

Id., para. 45. Obviously, the FCC was convinced that the Broadband Service Offering allows

<sup>&</sup>lt;sup>47</sup> As the record on rehearing establishes (Tr. 113-116, 421-424), as a mathematical matter, there are almost three million possible upstream and downstream combinations potentially available for the current Broadband Services data offering. Although Ameritech Illinois' ordering system for the Broadband Service, known as SOLID, presently limits the potential number of speed combinations available to CLECs ordering the Broadband Service to about 90 combinations, there is no evidence that those 90 combinations are insufficient for product differentiation purposes Moreover, Ameritech Illinois could expand the number of datastream speed combinations available through SOLID in the future if the currently available 90 combinations ever became insufficient.

<sup>&</sup>lt;sup>48</sup> It should also be noted that Ameritech Illinois' Broadband Service merely provides CLECs with another option for offering DSL services to end users, in addition to all of the pre-existing options for providing such DSL services. Accordingly, data CLECs who want to differentiate their DSL products are also free to do so through these other pre-existing means for providing DSL service. Am. Ill. Ex. 6.1 (Lube) at 12-13.

Rhythms and Covad to differentiate their product offerings and this Commission should find likewise.

Similarly, Rhythms' suggestion that Ameritech Illinois is somehow "attempting to mandate the technology, the configuration, and the types of service offerings available on the Project Pronto topology" (Rhythms Ex. 7.1 (Riolo) at 7) ignores the facts. Ameritech Illinois is required by the *Project Pronto Order* to conduct, is already conducting, and will continue to conduct, collaborative discussions with the CLECs to address further types of DSL that may be supported over the Project Pronto DSL-related facilities. Rhythms' assertion also ignores the fact that Ameritech Illinois, not Rhythms, is the party deploying the DSL-related Project Pronto facilities and bearing all of the associated investment risk. As a result, neither Rhythms nor any other CLEC should be able to dictate the deployment of a technology, a topology, a manufacturer, or even a feature or software release in Ameritech Illinois' network. Am. Ill. Ex. 6.2 (Lube) at 14-15. As explained above, Ameritech Illinois made its initial decision to deploy the DSL-related Project Pronto facilities based on sound economic and technical considerations. It cannot be forced to now deploy a different architecture that is neither economical nor technically efficient. As explained in Ameritech Illinois' Initial Brief in Docket No. 00-0393 (at pp. 25-27), under the Eighth Circuit's decisions in *IUB I* and *IUB III*, Ameritech Illinois cannot be lawfully required to unbundle a superior or different network than that which Ameritech Illinois has deployed. If Rhythms or another CLEC wants a different or particular type of DSL network technology or topology designed to serve its own individualized business needs or objectives, it certainly could undertake its own deployment of that other network. That is the essence of competition.<sup>49</sup>

<sup>&</sup>lt;sup>49</sup> It is worth noting that, even if a CLEC bought or designated a line card from the vendor that manufactured the NGDLC, there is no guarantee that the card would deliver the service expected by the CLEC.

## D. THE FACT THAT IT IS TECHNICALLY FEASIBLE TO FIBER SHARE OVER SOME TYPES OF NGDLC SYSTEMS IS IRRELEVANT TO THE COMMISSION'S UNBUNDLING DETERMINATION.

The record on rehearing establishes that the vast preponderance of the fiber-fed NGDLC equipment being deployed by Ameritech Illinois under Project Pronto is Alcatel Litespan 2000, which utilizes separate fiber paths for data and voice. This literally means only voice services such as POTS travel on the fibers dedicated to voice transport, and only data services such as DSL travel on the fibers dedicated to data transport. Therefore, no fiber sharing can take place within these Project Pronto NGDLC systems. Am. Ill. Ex. 6.0 (Lube) at 20. Although Rhythms and Covad admit that these NGDLC facilities, as deployed by Ameritech Illinois, will not carry voice and data traffic over the same fiber, they attempt to make much out of the fact that Ameritech Illinois could, as a technical matter, multiplex both voice and data signals onto the same optical signal (by purchasing and installing additional equipment) for transport over a single fiber, if it desired to do so. Rhythms and Covad suggest that Ameritech Illinois should have deployed such a "fiber sharing" Project Pronto NGDLC configuration and that Ameritech Illinois' "business decision" to have separate voice and data fibers is somehow improper. These CLECs, however, have failed to identify the relevance of Ameritech Illinois' business decision to deploy DSL-related facilities that utilize separate fibers rather than the same fibers for voice and data services. Nor have they explained why Ameritech Illinois should incur the additional costs associated with deploying DSL-related facilities that carry voice and data over the same fiber.

More specifically, the entire NGDLC system must work together to provide the DSL and voice services. The line cards alone will not provide the total functionality of any service. There has to be system-level, shelf-level and card-level software working together to provide service. In addition, all the hardware (*e.g.*, line cards and common cards), when combined with the software, has to work together in order to deliver the expected functionality or service. Without the correct version of system software, the capability sought by the CLEC may not be available on the NGDLC RT. Since the line card is only a sub-component of the NGDLC system, it has to match the common software of the overall system in order to deliver the desire service. Am. Ill. Ex. 7.0 (Keown) at 12-13. It again must be noted that, under *IUB I* and *IUB III*, Ameritech Illinois cannot be lawfully required to upgrade its software

Ameritech Illinois has sound business and technical reasons for building its network in the manner it has chosen, and its decision should not be second-guessed or nullified by CLECs or this Commission.

SBC's purchasing decisions with respect to the DSL-related Project Pronto facilities that it plans to deploy are driven in principal part by the desire to make the deployment of those facilities cost-effective. As the record on rehearing establishes, for a few select Project Pronto RT locations, Ameritech Illinois will be deploying Alcatel Litespan 2012 NGDLC equipment. This version of the Alcatel NGDLC equipment includes built-in OC-12 SONET multiplexer functionality at both the RT and the central office. This built-in SONET multiplexer functionality is used to establish an OC-12 optical system between the RT and the central office. This OC-12 system has the capacity for four OC-3 optical signals, allowing the OC-12 system to transport the NGDLC's voice OC-3 signal, the NGDLC's data OC-3c signal, and two additional OC-3 signals over the same fiber. <sup>50</sup> However, Ameritech Illinois will deploy the Alcatel Litespan 2012 NGDLC equipment for a Project Pronto RT site only when there is demand for additional high-capacity services in the area served by that RT site that cannot be served by the Alcatel Litespan 2000 NGDLC equipment. For example, if there were demand for DS-3 and/or OC-3 services for end users in that geographic area, the bandwidth in the two additional OC-3 signals available with the Alcatel Litespan 2012 NGDLC equipment could be used to serve those needs. Absent circumstances where such high demand exists, it is not economical for Ameritech Illinois to deploy the more-costly Alcatel Litespan 2012 NGDLC equipment for Project Pronto. Am. Ill. Ex. 6.0 (Lube) at 21.

to be compatible with the CLECs' line cards, as such an obligation would improperly require Ameritech Illinois to build a different network or provide superior quality service to CLECs.

In most instances, i.e., where Ameritech Illinois is deploying the Alcatel Litespan 2000 NGDLC, it would be possible to combine voice and data on the same fiber only by two means. First, Ameritech Illinois could combine (i.e., multiplex) these two optical signals in a higherspeed SONET system by purchasing and installing outboard multiplexers in the RT site and central office. However, doing so merely to force the NGDLC voice and data signals onto the same fibers would clearly amount to uneconomic use of otherwise unnecessary and costly multiplexing equipment. It simply would not be cost-justified for Ameritech Illinois to purchase and install the outboard SONET multiplexers for this purpose. Second, the Alcatel Litespan 2000 NGDLC could be made to carry voice and data signals on the same fibers by purchasing and installing additional components with the Litespan NGDLC equipment. These components would reconfigure the Litespan NGDLC system architecture for wavelength division multiplexing ("WDM"), such that the OC-3 signal for voice and the OC-3c signal for data are transmitted at separate wavelengths (i.e., colors of light) through the same fibers. Again, however, Ameritech Illinois is not deploying the additional Alcatel WDM components for the Litespan NGDLC systems because doing so would not be cost-effective. Simply put, the additional cost of the equipment required to achieve this reconfiguration is much greater than the incremental cost of using separate fibers for voice and data between the RT and the Central Office. Am. Ill. Ex. 6.0 (Lube) at 22-23.

The bottom line, which the CLECs completely ignore, is that Ameritech Illinois is under no obligation to purchase any particular or additional equipment to deploy in its network, particularly where that additional equipment is unnecessary and more costly, and where there is no economic reason for utilizing such equipment. The type of NGDLC being deployed by

 $<sup>^{50}</sup>$  Notably, this OC-12 multiplexing is based on time-division multiplexing, not on any wavelength multiplexing.

Ameritech Illinois under Project Pronto generally does not multiplex data and voice signals onto the same fibers. It is irrelevant whether Ameritech Illinois' NGDLC manufacturers make any other equipment that does enable such fiber sharing, or whether another manufacturer's equipment permits or utilizes such fiber sharing. Ameritech Illinois chooses its suppliers of electronic equipment based upon many factors, such as availability, system capacity, delivery interval, price, and warranty. Ameritech Illinois' business decisions with respect to Project Pronto are based upon economic engineering principles and are designed to achieve the most cost-efficient deployment of the facilities it plans to deploy. Am. Ill. Ex. 6.2 (Lube) at 6. As acknowledged by Staff witness Mr. Clausen, such business decisions are clearly within Ameritech Illinois' discretion. Staff Ex. 1.0 (Clausen) at 6.

It should also be noted that nothing in the 1996 Act or the FCC's implementing rules allows a CLEC or a regulatory body to dictate the type of technology or equipment, or the manufacturer of that equipment, that an incumbent LEC deploys in its network. Am. Ill. Ex. 6.0 (Lube) at 23-24. Rhythms and Covad's position seems to suggest that Ameritech Illinois should build a network that has no technological limitations, and should do so regardless of the cost of that network. Any network technology, however, intrinsically has limitations. Stated another way, specific network investments cannot possibly provide every conceivable network feature or function for every conceivable service offering that any particular carrier might want to offer end users. Am. Ill. Ex. 6.1 (Lube) at 8. More importantly, all network investments involve risk to the investor—*i.e.*, whether there will be a demand for services that utilize that investment, and whether the investor will be able to be recover the investment before it becomes obsolete. It would be inappropriate for any other party, whether it be this Commission or another carrier, to

dictate the type of new technology investments that Ameritech Illinois chooses to make in its network. Am. Ill. Ex. 6.1 (Lube) at 8-9.

The record on rehearing also establishes that there is no anti-competitive reason for Ameritech Illinois choosing to deploy a fiber-fed NGDLC technology that utilizes separate fibers for data and voice. This is demonstrated by the fact that Ameritech Illinois makes the Project Pronto architecture available to every CLEC, including Ameritech Illinois' advanced services affiliate, on the same basis via the wholesale Broadband Service, whether or not voice and data signals travel over the same fibers. Moreover, as far as a CLEC's ability to provide DSL service to an Ameritech Illinois POTS end user is concerned, it simply does not matter whether or not the data and voice signals travel on the same of different fibers. What is relevant, and what is beyond question, is the fact that Ameritech Illinois' planned deployment of DSL-related Project Pronto facilities provides CLECs with an *additional* option for accomplishing the same functional result as FCC-required line sharing, via the wholesale Broadband Service, that does not and would not otherwise exist. Am. Ill. Ex. 6.0 (Lube) at 24-25.

## THE UNIFORM 13-STATE PRICES NEGOTIATED BETWEEN COVAD AND SBC ARE IRRELEVANT TO THIS ILLINOIS-SPECIFIC ARBITRATION PROCEEDING.

The Commission should reaffirm is earlier decision that Ameritech Illinois' proposed rates for cross-connects are TELRIC-based, notwithstanding their difference from the rates in the SBC/Covad Agreement. An examination of the record in this proceeding reveals the following:

- Ameritech Illinois' proposed nonrecurring charges for cross-connects are TELRIC-based. Rhythms' argument that the rates are in excess of "true" cost is based on speculation – not evidence.
- Rates in the Line Sharing Amendment to the interconnection agreement between the SBC ILECs and Covad Communications (SBC/Covad Agreement) are not based on TELRIC; and there is no requirement that rates in negotiated agreements be TELRIC-based. Therefore, comparison of Ameritech Illinois' proposed rates to the rates of the SBC/Covad

- Agreement in no way detracts from the fact that the proposed rates for Rhythms are based on TELRIC.
- Rhythms' assumption that the SBC/Covad Agreement must be "profitable" to SBC on a rate element-by-rate-element, state-by-state basis is unfounded. Rather, the agreement has a number of different aspects and applies across the 13 SBC states. (The terms of the agreement will be made available in their entirety on a 13-state basis to Rhythms and to any other CLEC pursuant to the terms of Sec. 252(i) of the federal Act.) Therefore, comparison of individual rates offered Rhythms by Ameritech Illinois to the individual rates of the SBC/Covad Agreement cannot imply, much less prove, that Ameritech Illinois has overstated its TELRIC costs.
- Thus, there is no basis for concluding that the cross-connect rates proposed by Ameritech Illinois for its agreement with Rhythms do not comply the applicable TELRIC standard.

As Mr. Smallwood explained in the initial phase of this docket (Am. III. Ex. 4.0 (Smallwood) 2-3, 6-8) and as this Commission found in its original Arbitration Decision in this proceeding (Arbitration Decision at 53-54), the recurring and non-recurring charges for the cross-connects associated with the HFPL UNE proposed by Ameritech Illinois are based on and consistent with the TELRIC pricing methodology established for Illinois. In particular, those charges are based on the Central Office configuration that will actually be used in provisioning the HFPL UNE – not on the hypothetical configuration advocated by Rhythms. *Id.* The Commission has already correctly concluded that the CLEC-proposed configuration – locating the splitter on or near the MDF – was efficient, if at all, only from the narrow point of view of the petitioning CLECs – not at all from the point of view of Ameritech Illinois and its provision of services to all other customers, including other CLECs. *Id.* at 14. Nothing in the SBC/Covad Agreement changes that fact.

Rhythms' witness Murray speculates that the rate levels in the SBC/Covad Agreement "suggest" that the costs of providing the HFPL UNE in Illinois must be much lower than

indicated by Ameritech Illinois' supporting evidence. Rhythms Ex. 4.0 (Murray) at 5. However, her testimony is nothing but conjecture.

Ms. Murray is right to think that the nonrecurring charges of the SBC/Covad Agreement must be considered together with the recurring charges. Rhythms Ex. 4.0 (Murray) at 9. Clearly, if nonrecurring charges under-recover nonrecurring costs, one must look, at least in part, to the recovery of those costs via recurring charges. This, of course, is why it would be particularly inappropriate for the Commission to import the \$10 nonrecurring charge from the SBC/Covad Agreement (which is significantly below Ameritech Illinois' nonrecurring TELRIC costs for the HFPL UNE) while retaining the zero HFPL recurring rate adopted in the Arbitration Decision. Such a ruling, would clearly violate the appropriate cost standard of the federal Act, and would also implicate the confiscation prohibitions of the federal constitution. As the U.S. Supreme Court has stated:

The guiding principle has been that the Constitution protects utilities from being limited to a charge for their property serving the public which is so "unjust" as to be confiscatory. ... If the rate does not afford sufficient compensation, the State has taken the use of utility property without paying just compensation and so violated the Fifth and Fourteenth Amendments [to the United States Constitution]. (Citations omitted.)

Duquesne Light Company v. Barasch (1989), 488 U.S. 299 at 307-308, 109 S.Ct. 609 at 615-615, 102 L.Ed.2d 646.

Ms. Murray also ignores the fact that, as indicated by Ameritech Illinois' witness Ms. Chapman, the rates in the SBC/Covad Agreement are not based on TELRIC at all – whether Ameritech Illinois' TELRIC methodology or any other state's TELRIC methodology. Am. Ill. Ex. 8.0 (Chapman) at 17. Rather, those rates were the result of negotiations between the SBC and Covad – not the result of the application of the statutory cost standard which only applies in a Section 251/252 *arbitration*. *Id.* Nor is there any legal requirement that the rates in

agreements voluntarily *negotiated* between the parties be based on TELRIC. Thus, comparing the rates of the SBC/Covad Agreement to Ameritech Illinois' TELRIC figures does nothing to impugn the validity of the TELRIC costs filed by Ameritech Illinois and previously approved by the Commission for this *arbitrated* agreement with Rhythms.

Ms. Murray also muses that Ameritech Illinois' "actual" costs must be much lower than those that it filed, or SBC would be losing money on the Covad arrangement. Rhythms Ex. 4.0 (Murray) at 5. This line of conjecture ignores the fact that, as Ms. Chapman noted, the agreement between SBC and Covad applies across *all* 13 SBC states. Thus, even if a comparison of the SBC/Covad Agreement's rates to filed TELRIC costs were somehow meaningful (which it is not), at a minimum the analysis would have to be made on a demand-weighted basis across all of SBC's 13 states. And while Ms. Murray does do a surface comparison of the SBC/Covad Agreement's recurring rate to extant Pacific Bell rates in California, that still says nothing about the overall profitability to SBC of the entire business arrangement between SBC and Covad across all 13 SBC states and across all business aspects of the agreement. It should be noted that the agreement obligates Covad to pay the recurring rate in Texas despite an interim order from the Texas commission setting a zero recurring rate for the HFPL.

As Ms. Chapman noted, the nature of a negotiated agreement is much different from an arbitrated agreement. In a negotiated agreement, all of the agreed-upon terms are dependent upon each other and are the result of the normal give and take of negotiation. An individual term or condition may be a "give" based on a "take" on another term. For this reason, it is inappropriate to look at individual terms out of the context of the agreement. Am. Ill. Ex. 8.0 (Chapman) at 18.

As part of the negotiations of the SBC/Covad Agreement, the parties reached an agreement to utilize a single set of recurring and nonrecurring charges across all of SBC's 13-state operating area. As a result, the agreed-upon rates are higher in some states than they would have been had the terms been negotiated on a state-by-state basis, and lower in other states. The only way negotiated rates like these have business validity is if they apply in every state. Otherwise, a CLEC would choose the agreement's rate in states where the state-specific rate is higher and the state-specific rate in states where the agreement's rate is higher. *Id*.

Straight pricing issues aside, the agreement includes other non-price terms that would affect the profitability of the agreement to SBC by providing for either additional potential revenues or potential cost savings or efficiencies. For example, the agreement states that SBC will provide splitters to Covad on a line-at-a-time basis (Rhythms Cross Ex. J at para. K), thus settling that issue between the parties and avoiding the inherent inefficiencies to SBC that shelf-at-a-time provisioning of splitters would involve.

Moreover, as noted above, all relevant terms of the SBC/Covad Agreement are being made available to Rhythms and any other CLEC who wishes to "opt-in" to the agreement. Thus, Rhythms can take advantage of the same arrangement (prices and all) that is available to Covad, simply by exercising its rights under Section 252(i) of the federal Act. It is thus unnecessary and inappropriate to import only selected provisions of the negotiated SBC/Covad Agreement into the one that is subject to this arbitration.

In sum, Rhythms' speculation notwithstanding, the evidence shows that the nonrecurring charges for cross-connects proposed by Ameritech Illinois for the Rhythms interconnection agreement comply with the applicable legal standard and should be approved.

## **CONCLUSION**

For all the foregoing reasons and the reasons set out in Ameritech Illinois' Application for Rehearing, the Commission should order the parties to enter into an Interconnection Agreement Amendment consistent with Ameritech Illinois' position on the issues in this rehearing.

Respectfully submitted,

**AMERITECH ILLINOIS** 

By:\_\_\_\_\_One of its attorneys

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